CLIPPER™

WINDSOR®

CARPET EXTRACTOR

Operating Instructions (GB/USA)
Bedienungsanleitung (GER)

MODEL:	***COUNTRY***
CLP12IA	**AUSTRALIA**
CLP12IB	**BRITIAN**
CLP12IE	**EUROPE**
CLP12IS	**SWITZERLAND**

QUEST® . . . for Continuous Improvement.
Windsor's Quality Management System is Certified ISO 9001.

CE
IPX4

Read these instructions before operating the machine
Bitte lesen Sie diese Anleitungen, bevor Sie die Maschine in Gebrauch nehmen

AH
86038280 07/14/14
PRV NO. 98656

MACHINE DATA LOG

Model: _____

Date of Purchase: _____

Serial Number: _____

Dealer: _____

Address: _____

Phone Number: _____

Sales Representative: _____

Warranty Registration

Thank you for purchasing a Windsor product. Warranty registration is quick and easy. Your registration will allow us to serve you better over the lifetime of the product.
To register your product go to:

www.windsorind.com/WarrantyRegistration.aspx

For customer assistance:

1-800-444-7654

WINDSOR

TABLE OF CONTENTS

Machine Data Log. *2*
Table of Contents *3*

HOW TO USE THIS MANUAL

How to use this Manual. *1-1*

SAFETY

Important Safety Instructions *2-1*
Hazard Intensity Level. *2-2*
Grounding Instructions. *2-3*

OPERATIONS

Technical Specifications. *3-1*
Components/Controls *3-2*
Machine Operation. *3-5*
Filling the Solution Tank. *3-7*
Cleaning. *3-8*
Accessory Tool Usage *3-11*

MAINTENANCE

Vacuum Motor *4-1*
Solution Pump *4-2*
Belt Replacement *4-2*
Periodic Maintenance *4-3*
Daily/Regular Maintenance *4-3*
Machine Troubleshooting *4-4*

GROUP PARTS LIST

Brush *5-1*
Control Panel *5-3*
Frame *5-5*
Pump *5-7*
Recovery Tank *5-11*
Solution Tank *5-13*
Vacuum Shoe *5-15*
Wiring – Schematic *5-17*
Suggested Spare Parts *5-18*
EC Declaration of Conformity *5-19*

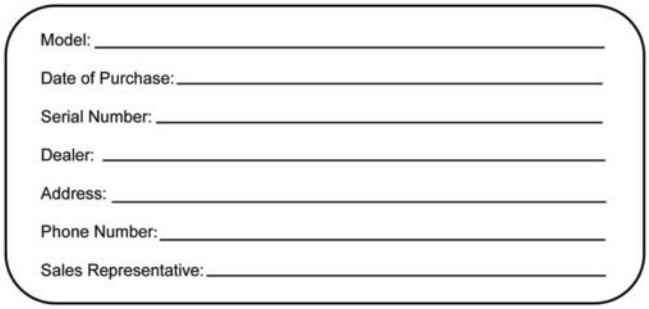
HOW TO USE THIS MANUAL

This manual contains the following sections:

- HOW TO USE THIS MANUAL
- SAFETY
- OPERATIONS
- MAINTENANCE
- PARTS LIST

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering correct repair parts.

Parts may be ordered from authorized Windsor dealers. When placing an order for parts, the machine model and machine serial number are important. Refer to the MACHINE DATA log which is filled out during the installation of your machine. The MACHINE DATA log is located on the inside of the front cover of this manual.



The model and serial number of your machine is on the bottom back-end of the machine.

The SAFETY section contains important information regarding hazard or unsafe practices of the machine. Levels of hazards is identified that could result in product or personal injury, or severe injury resulting in death.

The OPERATIONS section is to familiarize the operator with the operation and function of the machine.

The MAINTENANCE section contains preventive maintenance to keep the machine and its components in good working condition. They are listed in this general order:

- Vacuum Motor
- Solution Pump
- Belt Replacement
- Periodic Maintenance
- Daily/Regular Maintenance
- Machine Troubleshooting

The PARTS LIST section contains assembled parts illustrations and corresponding parts list. The parts lists include a number of columns of information:

- **REF –** column refers to the reference number on the parts illustration.
- **PART NO.** – column lists the part number for the part.
- **PRV NO.** – reference number.
- **QTY** – column lists the quantity of the part used in that area of the machine.
- **DESCRIPTION** – column is a brief description of the part.
- **SERIAL NO. FROM** – column indicates the first machine the part number is applicable to. When the machine design has changed, this column will indicate serial number of applicable machine. The main illustration shows the most current design of the machine. The boxed illustrations show older designs. If column has an asterisk (*), call manufacturer for serial number.
- **NOTES** – column for information not noted by the other columns.

NOTE: If a service or option kit is installed on your machine, be sure to keep the KIT INSTRUCTIONS which came with the kit. It contains replacement parts numbers needed for ordering future parts.

NOTE: The number on the lower left corner of the front cover is the part number for this manual.

IMPORTANT SAFETY INSTRUCTIONS
When using an electrical appliance, basic precaution must always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.
This machine is for commercial use.

⚠WARNING: **To reduce the risk of fire, electric shock, or injury:**

Connect to a **properly grounded outlet**.

Do not leave the machine unattended. Unplug machine from outlet when not in use and before maintenance or service.

Use only indoors. Do not use outdoors or expose to rain.

Do not allow machine to be used as a toy. **Close attention** is necessary when used by or near children.

Use only as described in this manual. Use only manufacturer's recommended components and attachments.

Do not use damaged electrical cord or plug. Follow all instructions in this manual concerning grounding the machine. If the machine is **not working properly**, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.

Do not pull or carry machine by electrical cord, use as a handle, close a door on cord, or pull cord around sharp edges or corners.

Do not run machine over cord. **Keep** cord away from heated surfaces.

Do not unplug machine by pulling on cord. To unplug, grasp the electrical plug, not the electrical cord.

Do not handle the electrical plug or machine with wet hands.

Do not operate the machine with any openings blocked. Keep openings free of debris that may reduce airflow.

Do not vacuum anything that is burning or smoking, such as cigarettes, matches, or hot ashes.

This machine is not suitable for picking up health endangering dust.

Turn off all controls before unplugging.

Machine can cause a fire when operating near flammable vapors or materials. Do not operate this machine near flammable fluids, dust or vapors.

This machine is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices for more than normal housekeeping purposes.

Maintenance and repairs must be done by qualified personnel.

If foam or liquid comes out of machine, switch off immediately.

SAVE THESE INSTRUCTIONS

HAZARD INTENSITY LEVEL

The following symbols are used throughout this guide as indicated in their descriptions:

HAZARD INTENSITY LEVEL
There are three levels of hazard intensity identified by signal words -**WARNING** and **CAUTION** and ***FOR SAFETY.*** The level of hazard intensity is determined by the following definitions:

⚠ WARNING

WARNING - Hazards or unsafe practices which COULD result in severe personal injury or death.

⚠ CAUTION

CAUTION - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

FOR SAFETY: To Identify actions which must be followed for safe operation of equipment.
Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition. Following is information that signals some potentially dangerous conditions to the operator or the equipment. Read this information carefully. Know when these conditions can exist. Locate all safety devices on the machine. Please take the necessary steps to train the machine operating personnel.

FOR SAFETY:
DO NOT OPERATE MACHINE:
Unless Trained and Authorized.
Unless Operation Guide is Read and understood.
In Flammable or Explosive areas.
In areas with possible falling objects.

WHEN SERVICING MACHINE:
Avoid moving parts. Do not wear loose clothing; jackets, shirts, or sleeves when working on the machine. Use Windsor approved replacement parts.

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THIS PRODUCT IS FOR COMMERCIAL USE ONLY.

ELECTRICAL:
The amp, hertz, and voltage are listed on the data label found on each machine. Using voltages above or below those indicated on the data label will cause serious damage to the motors.

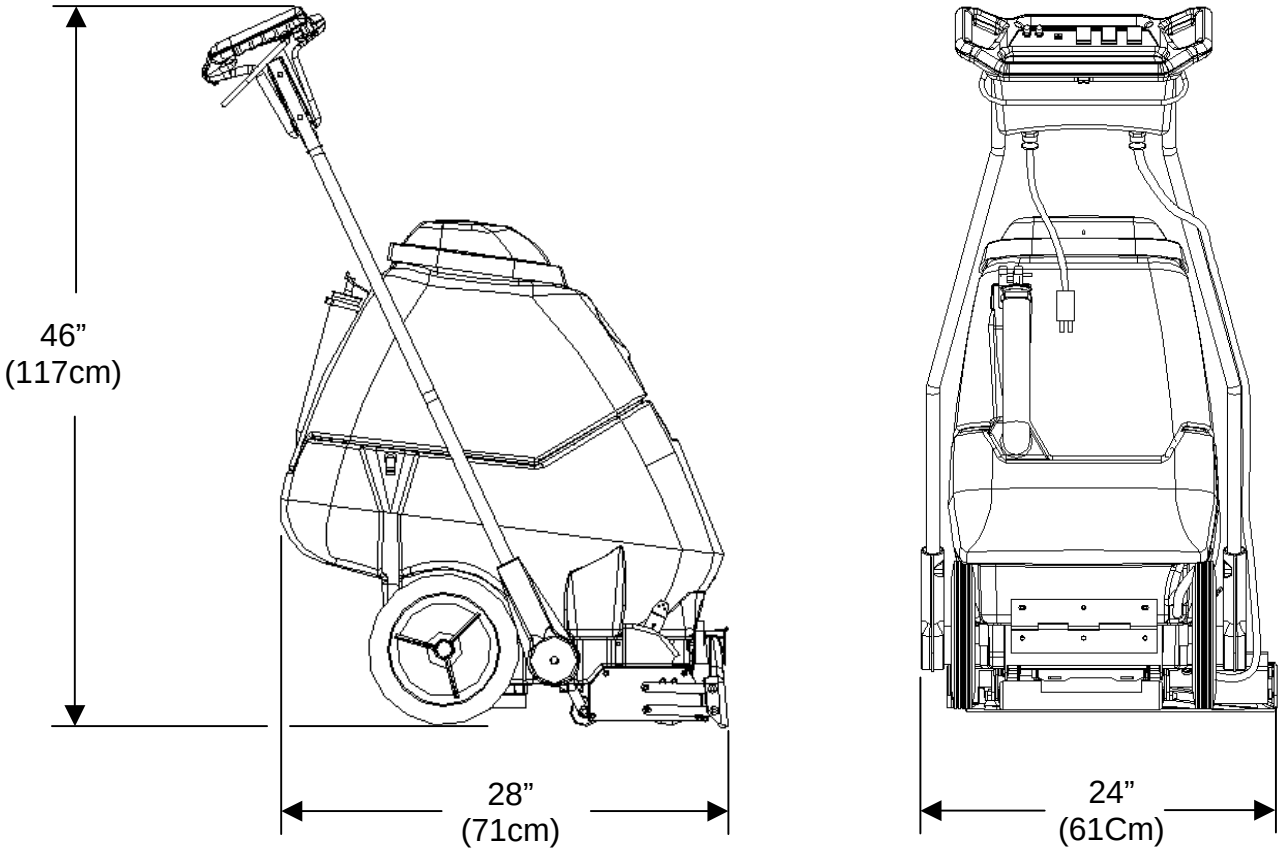
EXTENSION CORDS:
If an extension cord is used, the wire size must be at least one size larger than the power cord on the machine, and must be limited to 50 feet (15.5m) in length.

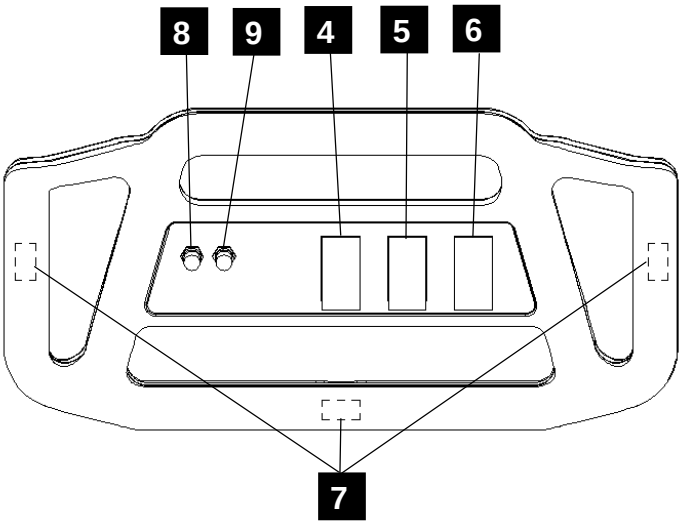
GROUNDING INSTRUCTIONS:
This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

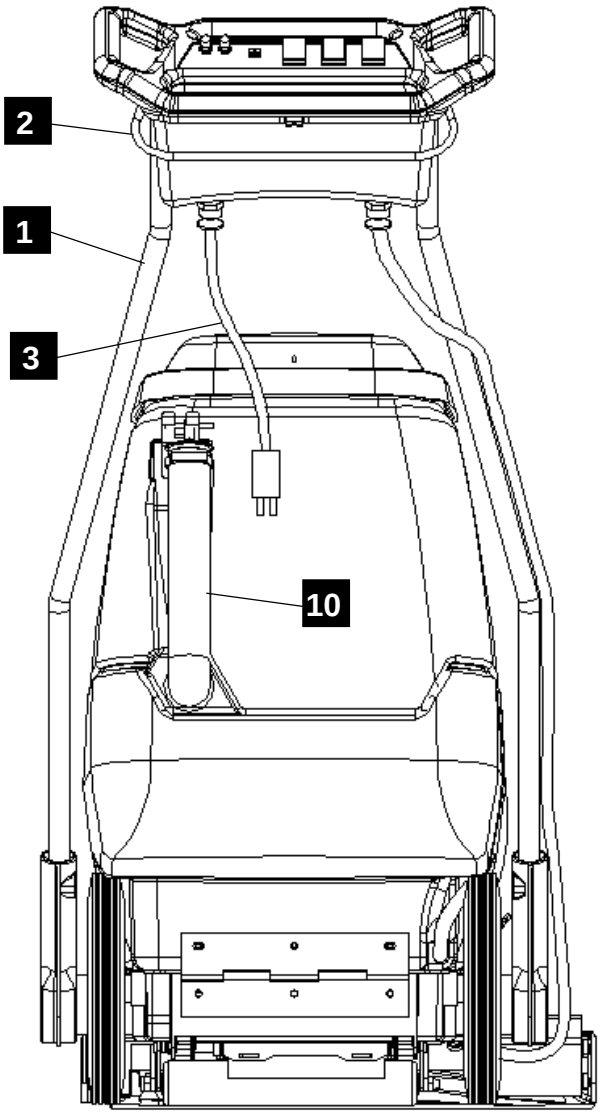
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

TECHNICAL SPECIFICATIONS

ITEM	DIMENSION/CAPACITY
Electrical	230-240V, 7A, 50 HZ
Electric Vacuum Motor	(1) 3 stage, 1 hp, 99 cfm (2.80 cubic m/min.)
Waterlift	117” (297cm)
Brush	(1) 18” (45.7cm.)
Brush Speed	1000 rpm
Solution Pump	100 PSI, diaphragm style, internal bypass
Solution Capacity	12 gallons (45.5l)
Solution Spray	2 quick change jets.
Recovery Capacity	12 gallons (45.5l)
Vacuum Shoe	20” (51 cm) cast aluminum with spring loaded down pressure
Wheels	(2) 10” dia. (25cm) wheels by 2”
Dimensions - Weight	105lbs. (48kg)
Dimensions - Length	28” (71cm)
Dimensions - Height	46” (117cm)
Dimensions - Width	24” (61cm)
Power Cable	50’ (12.7m) (1mm)



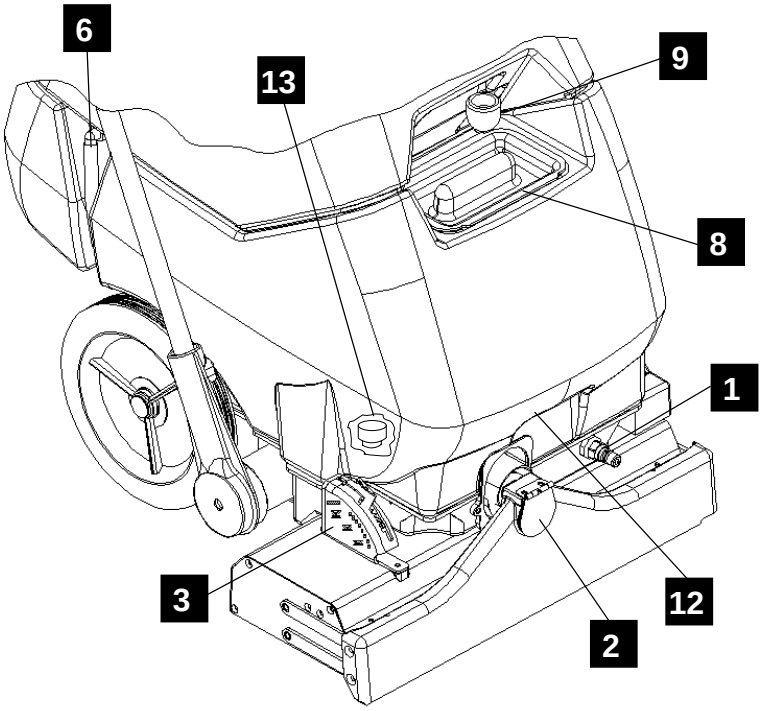


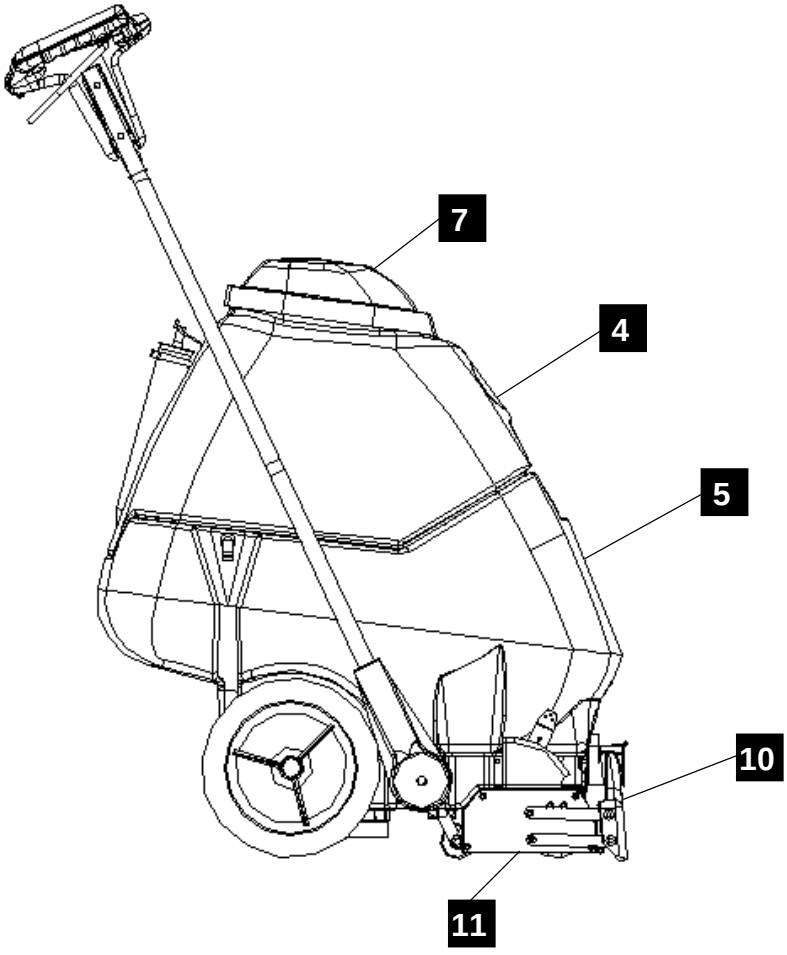


1. **Main Handle.** Used to pull and maneuver machine.
2. **Handle Adjustment.** Used to adjust height of handle, and allow machine to be used in “PUSH” or “PULL orientation.
3. **Electrical Cord.**
4. **Solution Switch.** Turns on pump. Continuous position (bottom) activates electro-valve to dispense solution to floor through jets. Intermittent position (up) requires operator to depress 1 of 3 trigger switches to dispense solution. Center position is off.
5. **Brush Motor Switch.** Turns on brush motor.
6. **Vacuum Motor Switch.** Turns on vacuum motor.
7. **Trigger Switches.** Activates electro-valve to dispense solution to floor through jets when solution switch is in the intermittent position.
8. **Brush Motor Circuit Breaker.** 4 amp. Breaker protecting brush motor.
9. **Vacuum Motor Circuit Breaker.** 7 amp. Breaker protecting vacuum motor.
10. **Recovery Dump Hose.** Facilitates draining dirty cleaning solution.

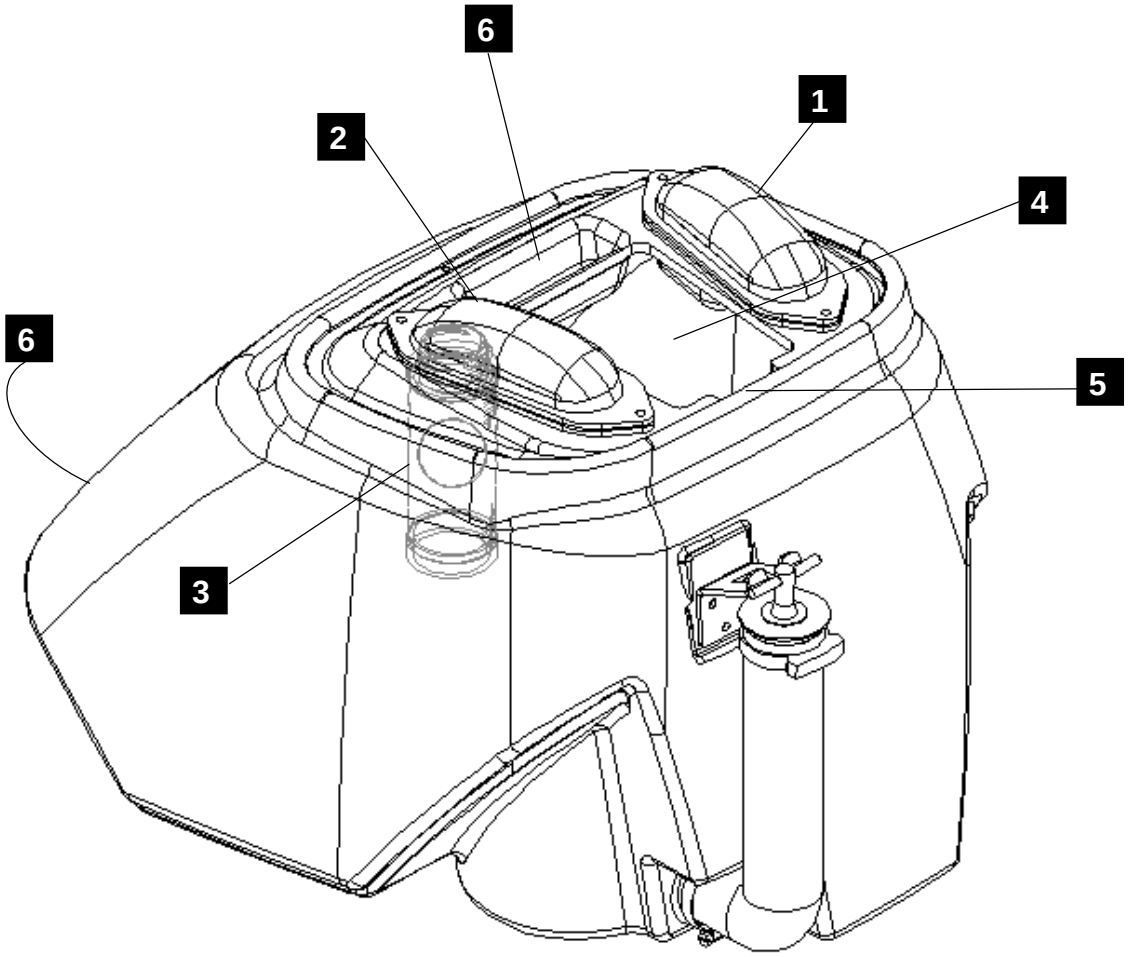
CONTROLS/COMPONENT LOCATIONS

1. **Solution Accessory Tool Hookup.** Used for various auxiliary cleaning tools.
2. **Vacuum Hose Door.** Used to connect various auxiliary 1 ½ inch cleaning tool vacuum hoses.
3. **Brush Height Adjustment.** Used to regulate brush height from storage position to various carpet heights.
4. **Recovery Tank.** Used to collect dirty cleaning solution.
5. **Solution Tank.** Used to hold cleaning solution.
6. **Solution Dump Hose.** Facilitates draining excess cleaning solution from solution tank.
7. **Recovery Tank Dome.**
8. **Solution Tank Lid.**
9. **Solution Tank Fill Hose.**
10. **Vacuum Shoe.**
11. **Brush Housing.**
12. **Front Lifting Handle.**
13. **Cleaning Solution Filter.**

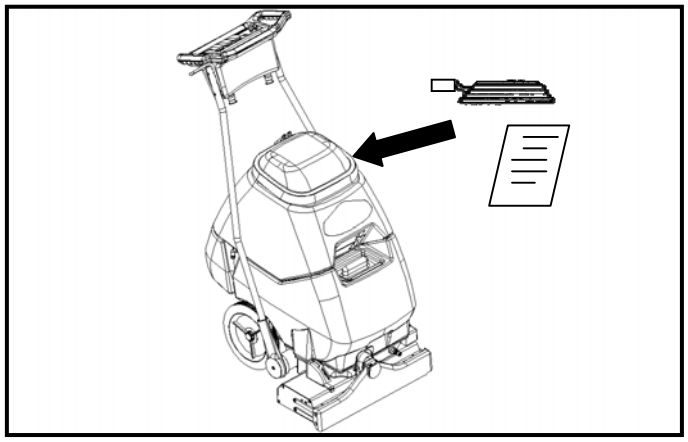




1. **Solution Intake Cover.**
2. **Vacuum Intake Cover.**
3. **Float Shut-Off.**
4. **Clean-Out Opening.**
5. **Pour Spout.**
6. **Lift Handle.**

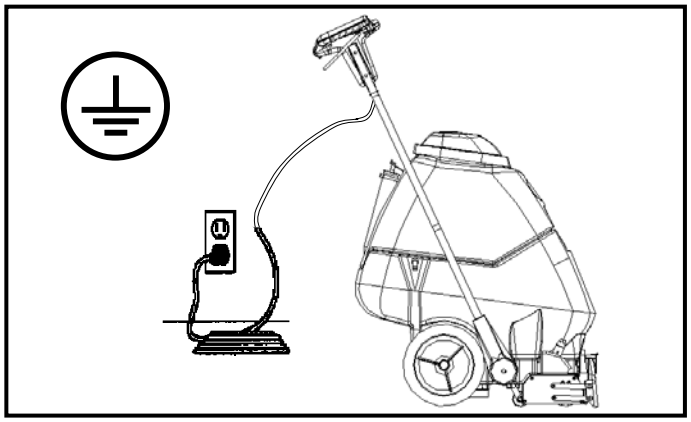


OPERATIONS



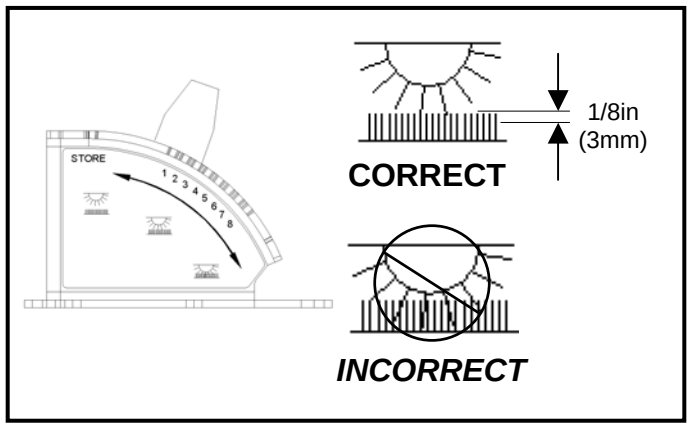
STEP **1**

Remove electrical cord and literature from recovery tank. Fill solution tank (see filling instructions).



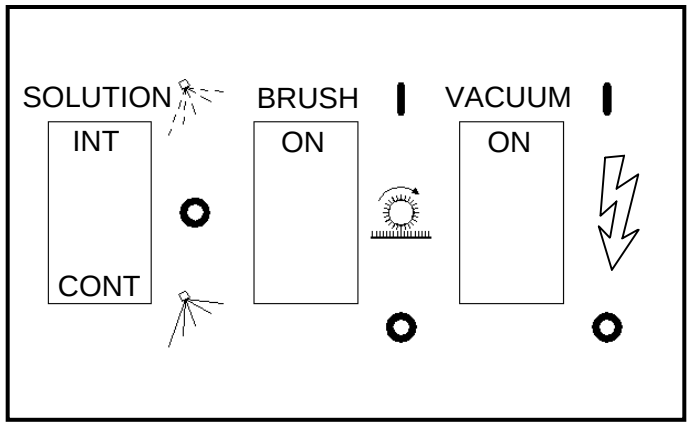
STEP **2**

Plug cord into grounded outlet. *Note: Be sure dome is seated on recovery tank, and float shut-off is installed correctly.*



STEP **3**

Adjust brush to proper setting. *Note: For good operation the brush must skim the carpet. If circuit breaker trips raise brush to prevent damage to motor or carpet.*

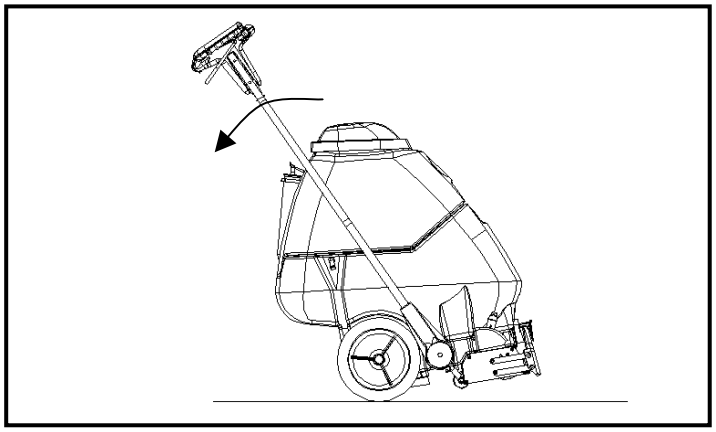


STEP **4**

Turn on brush and vacuum motor switches (“ON”=“I”). Turn on solution switch for continuous spray or set switch to intermittent to allow use of trigger switches.

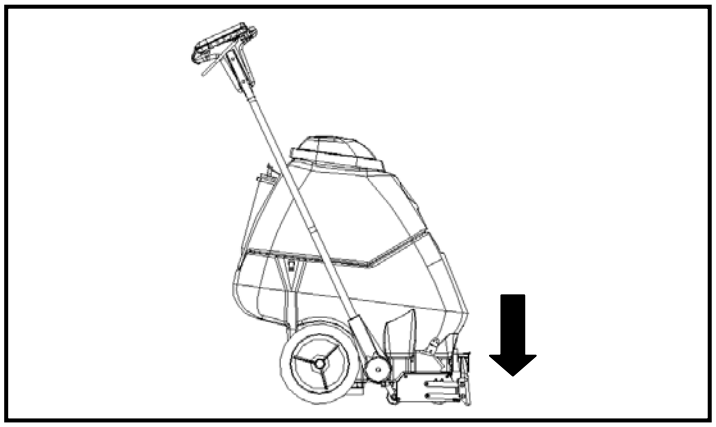
Adjust handle to comfortable operating position. Tip machine back by main handle to move to starting point.

STEP **5**



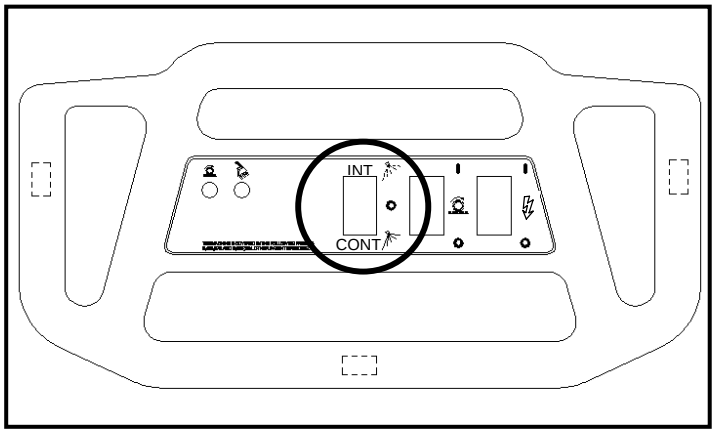
Lower machine to floor.

STEP **6**

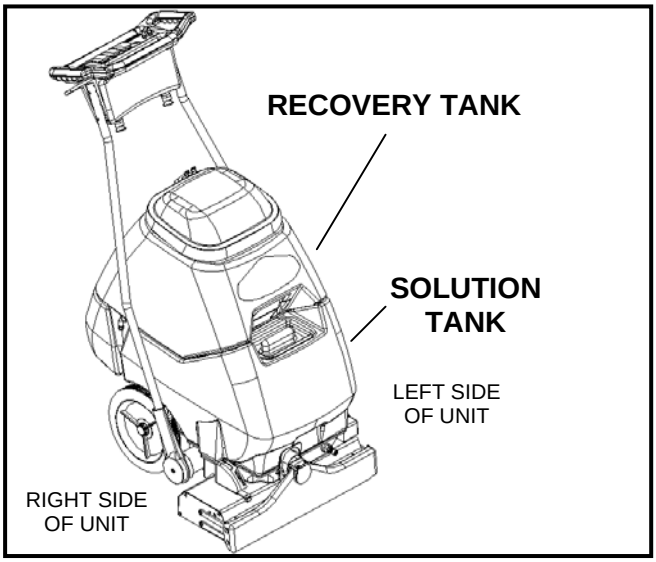


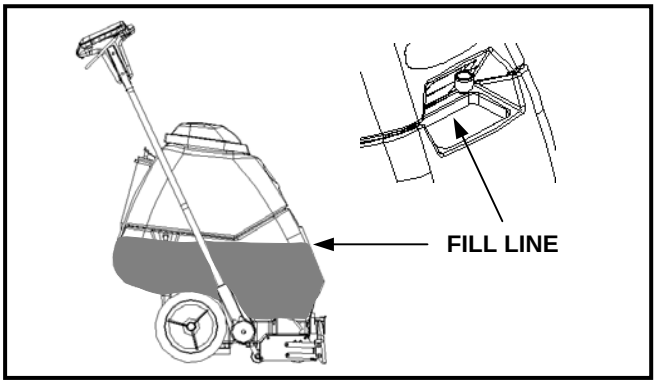
Select continuous setting to start solution spray or select intermittent setting to enable use of trigger switches to start solution spray.
The intermittent setting requires the operator to hold any one of the three trigger switches in the “on” position with the fingers, and is typically used in small areas where short cleaning passes are made.
The continuous setting allows the operator to set the switch in the “on” position with one touch, and is typically used in large areas where long cleaning passes are made.

STEP **7**

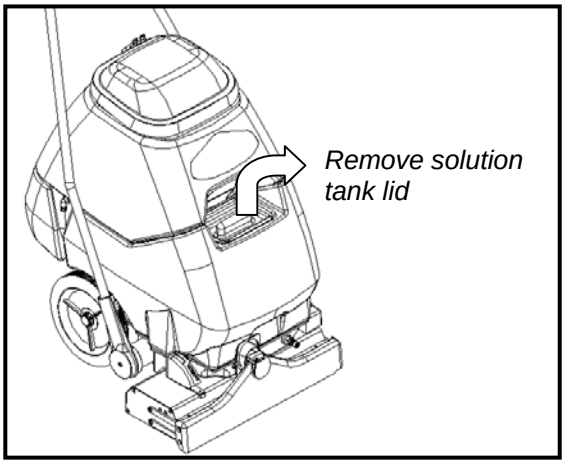


FILLING OPERATIONS

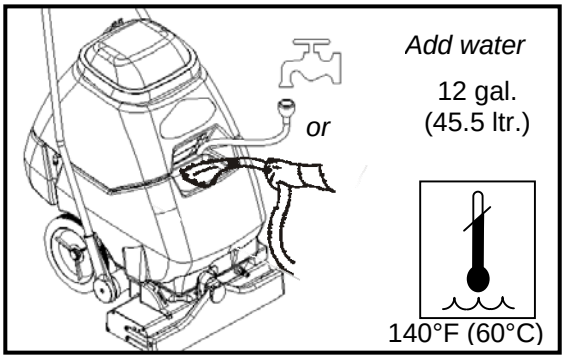




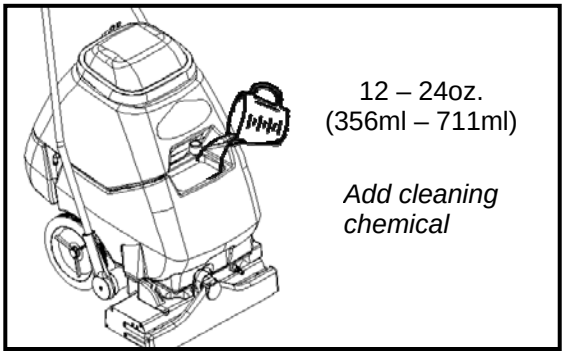
STEP **1**



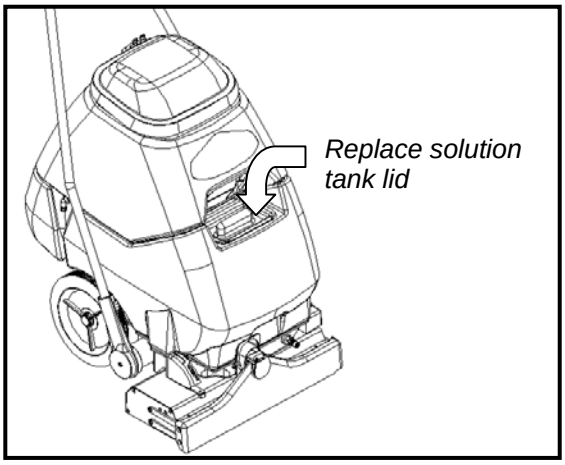
STEP **2**



STEP **3**



STEP **4**



FILLING THE CLIPPER
NOTE: Use clean bucket of water to fill solution tank

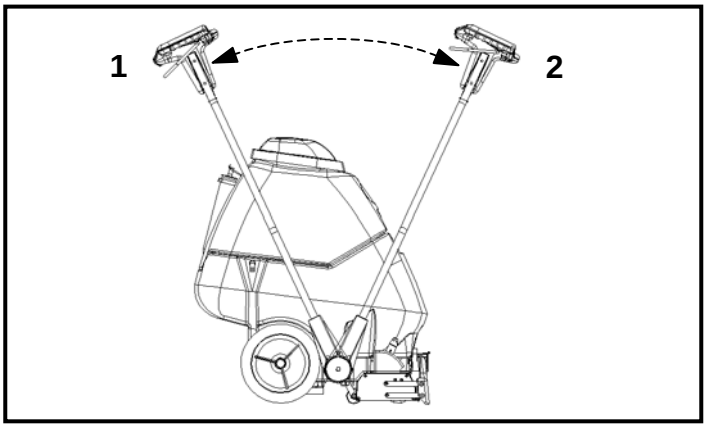
Do not put defoamer, solvents, spotter or prespray chemicals in the solution tank.

Do not allow water to spill into vacuum motor inlet. Dry spillage from top of solution tank before replacing recovery tank.

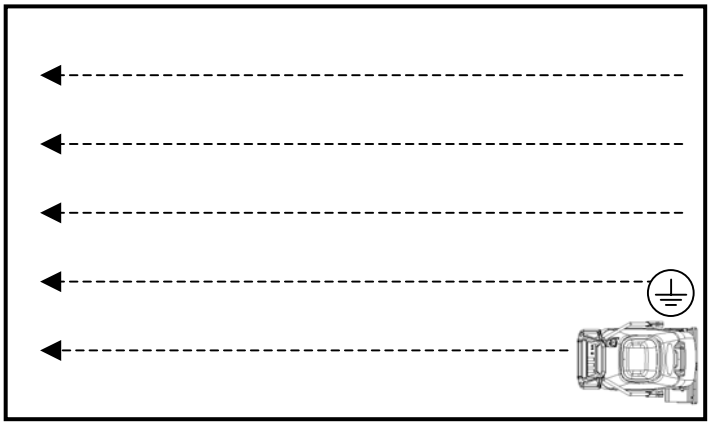
CHEMICALS

Suitable Chemicals	Non-Compatible Chemicals
Alkalis	*Aldehydes*
Detergents	*Aromatic Hydrocarbons*
Hydroxides	*SP Butyls*
Soaps	*Carbon Tetrachloride*
Vinegar	*Clorox**
	Chlorinated Bleaches
	Chlorinated Hydrocarbons
	*Lysol**
	Methyl Ethel Ketone (MEK)
	Perchorethylene (perc)
	Phenolics
	Trichlorethylene
	D-Limonene

** Product Trademark Names*

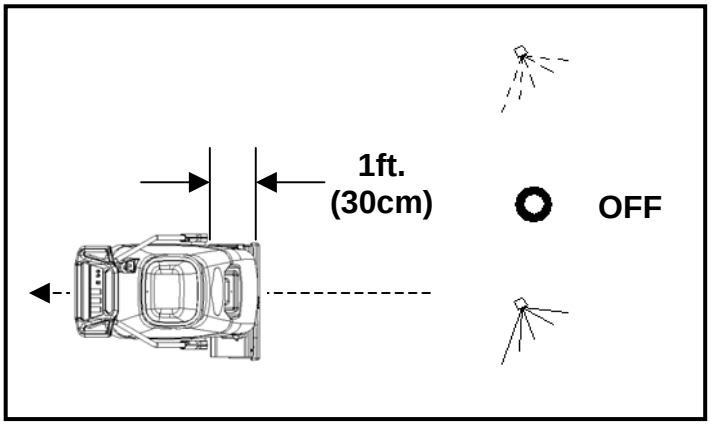


1. This machine can be operated in either direction. For smaller areas operate the machine by pulling rearward.
2. For larger unobstructed areas, flip the handle and use the machine's brush assisted propelling motion.



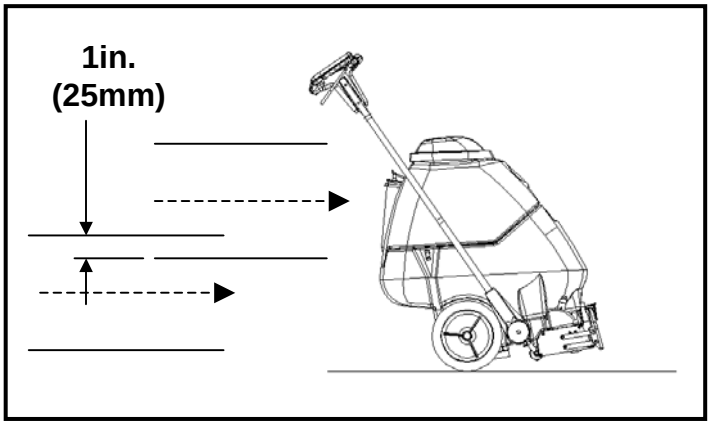
STEP **1**

Start at wall closest to power outlet. For small areas, pull straight back without pushing down on handle.



STEP **2**

Release intermittent trigger switches or turn off continuous setting on solution switch approximately 1 foot before ending cleaning pass.



STEP **3**

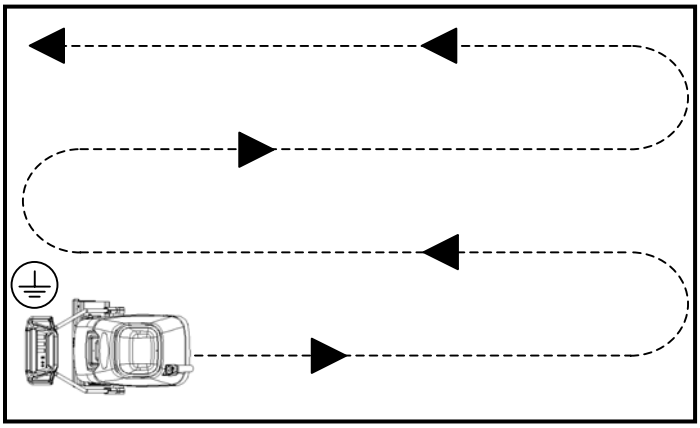
Push down on handle to raise vacuum shoe and brush before moving to the next cleaning pass. Overlap brush contact area a minimum of 1inch on the right (close cleaning) side of machine. Overlap a minimum of 2inches on the left (drive belt) side of machine. Refer to illustration for the left and right side of the machine.

CLEANING PROCEDURE

Start at wall closest to power outlet. For large areas flip handle and operate machine in parallel passes, overlapping brush path. Clean perimeter last.

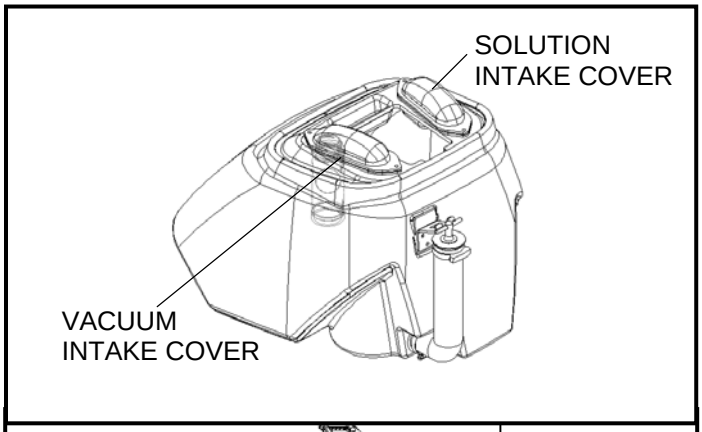
OR

STEP **1**



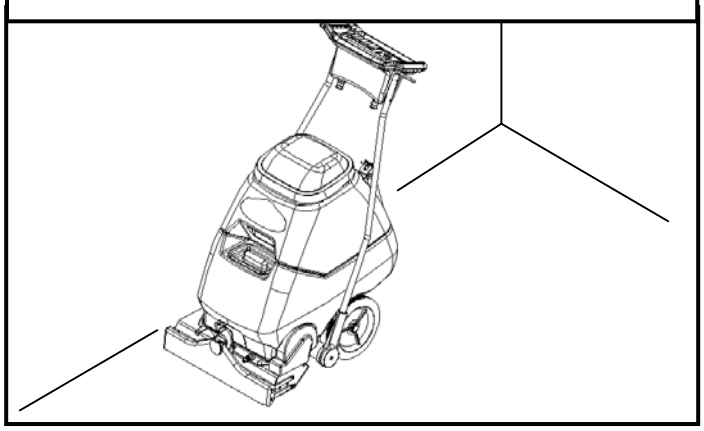
During operation, observe the following: The Clipper is equipped with clear internal covers to facilitate operator viewing of dirty solution and vacuum air flow. During operation, observe the vacuum intake cover. Large amounts of water or foam entering the vacuum system can damage the vacuum motor. If you notice either condition, **shut down the machine immediately**. Empty recovery tank and/or add defoamer to recovery tank.

STEP **4**



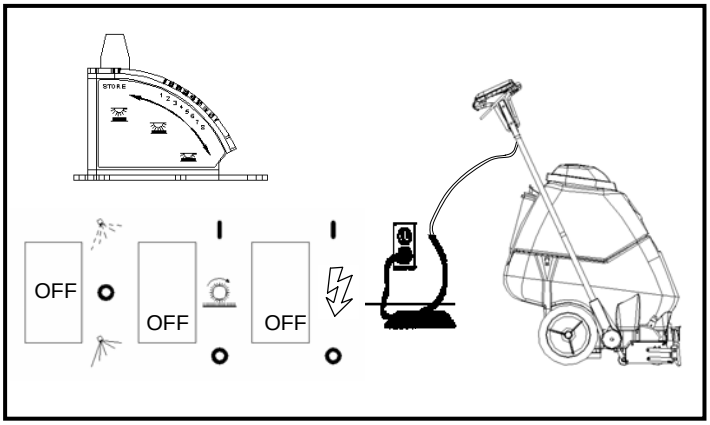
Use right side of machine for cleaning against walls.

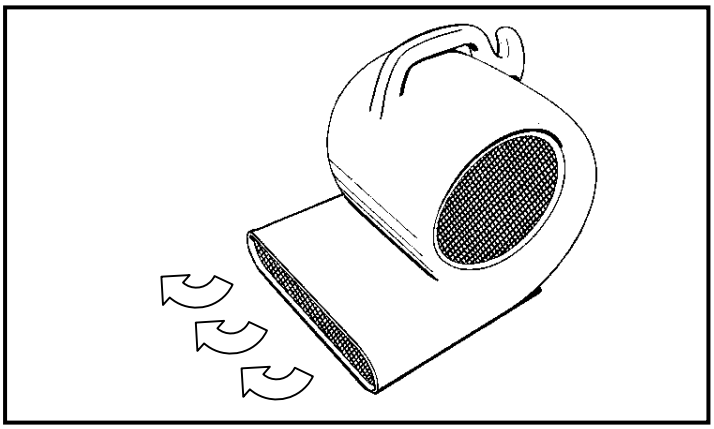
STEP **5**



After cleaning, turn off all controls, return brush to storage position and carefully unplug machine.

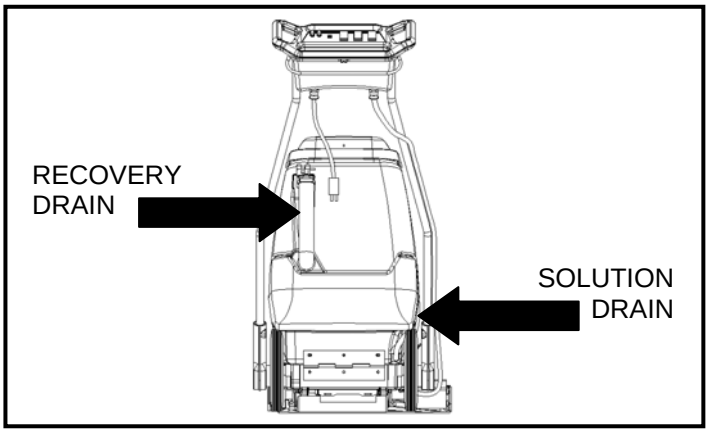
STEP **6**





STEP **7**

To speed drying, use a Windblower™ fan.



STEP **8**

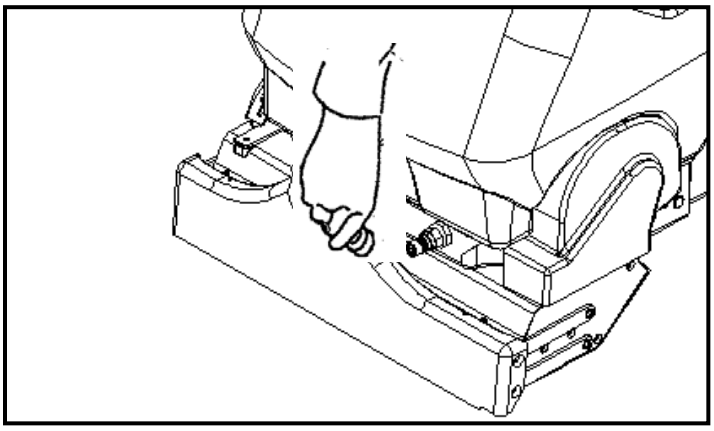
Empty recovery tank by releasing dump hose. Use a hose with cold water to clean out the recovery tank. Also drain solution tank after each use.

ACCESSORY TOOL USAGE

Use only one of the following acceptable accessory tools.
86000020 – PRV NO. HT
86000000 – PRV NO. DDH
86041150 – PRV NO. DH
86031540 – PRV NO. 39504
86000610 – PRV NO. 89227
86000600 – PRV NO. 89226

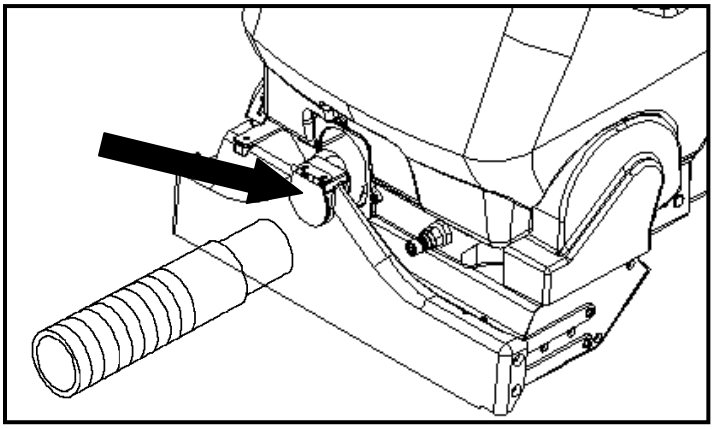
Pull back collar and insert over machine mounted fitting, then release collar to lock into place.

STEP **1**



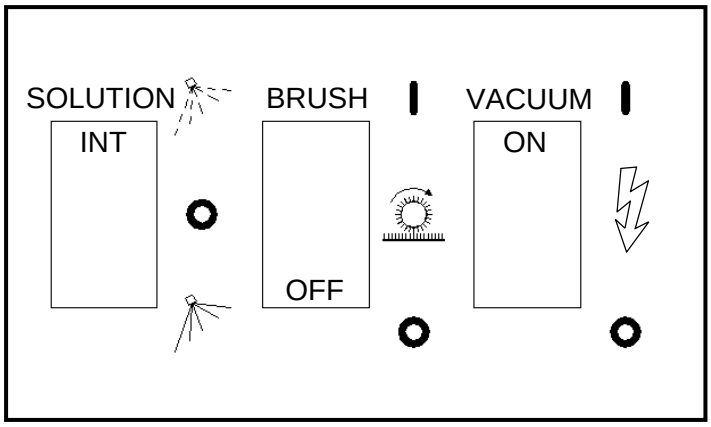
Lift door on front of vacuum shoe and insert 1 ½ inch hose cuff into hole.

STEP **2**



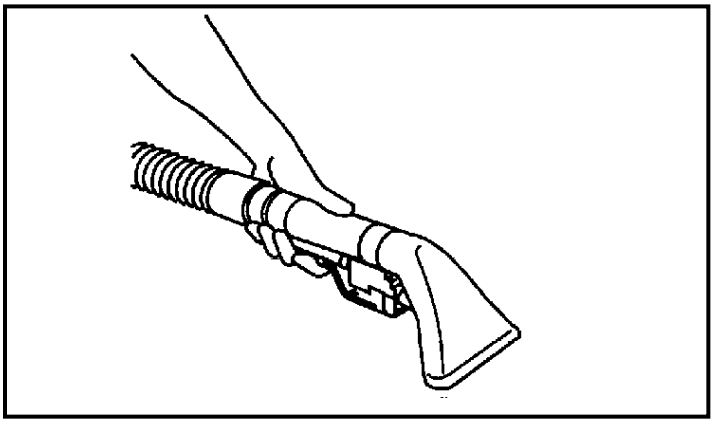
Turn on vacuum motor switch and set solution switch to intermittent position.
Note: Be sure brush switch is in off position and brush is in storage position.

STEP **3**



Squeeze handle on accessory tool to begin cleaning.

STEP **4**



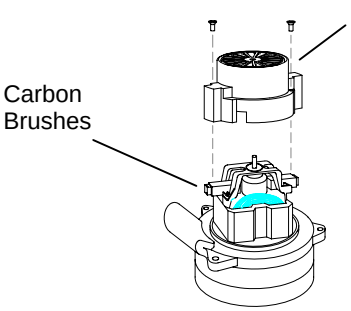
⚠WARNING:

ONLY QUALIFIED MAINTENANCE PERSONNEL ARE TO PERFORM THE FOLLOWING REPAIRS.

VACUUM MOTOR REPLACEMENT

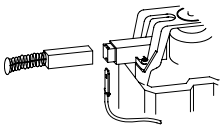
1. Turn off all switches and unplug machine.
2. Remove recovery tank.
3. Remove the (2) screws that fasten the solution tank to the frame, and tilt tank back to expose the inside of the frame.
4. Locate the vacuum motor wires and disconnect at the connector. Close the solution tank.
5. Remove the (6) screws holding the vacuum motor cover 86003080 – PRV NO. **27809**) to the solution tank.
6. Remove the vacuum motor.
7. Reverse process to install vacuum motor.

Vacuum Motor Carbon Brushes Replacement (Windsor)

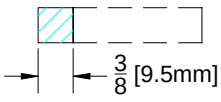


WARNING: The green ground wire must be attached for safe operation. See wiring diagram.

If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.

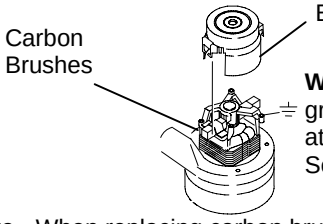


Important:
These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.



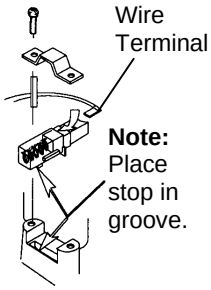
Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.

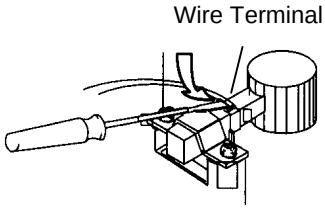
Vacuum Motor Carbon Brushes Replacement (Ametek)



WARNING: The green ground wire must be attached for safe operation. See wiring diagram.

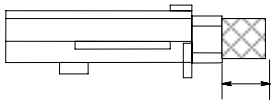
Note: When replacing carbon brushes loosen wire terminal **BEFORE** removing screws on bracket.





If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center.

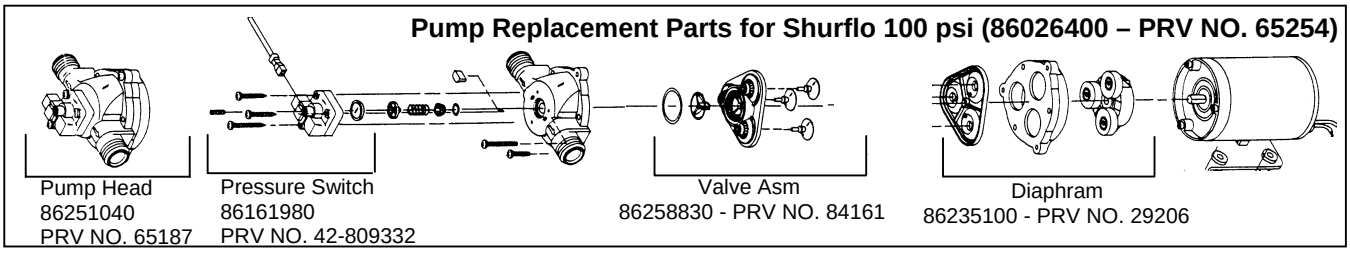
Important:
These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.

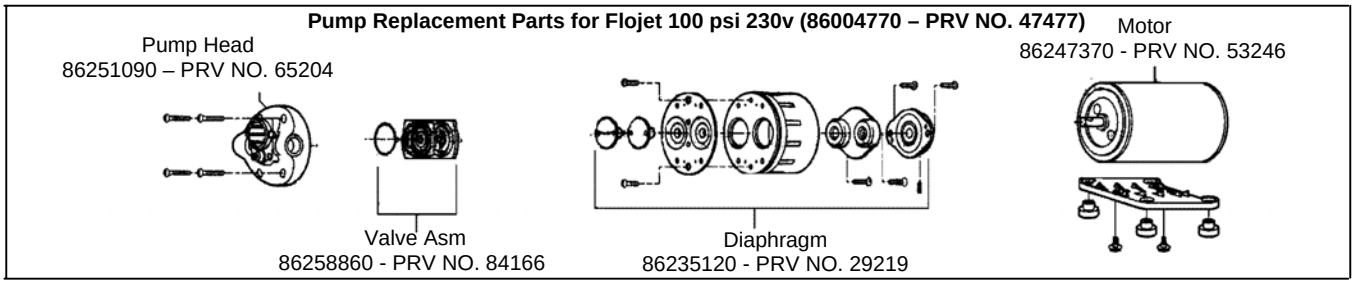


Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.

SOLUTION PUMP REPLACEMENT

1. Turn off all switches and unplug the machine.
2. Remove recovery tank.
3. Remove the (2) screws that fasten the solution tank to the frame, and tilt tank back to expose the inside of the frame.
4. Remove solution hoses from fittings in pump.
5. Remove the (2) screws that fasten the pump to the frame.
6. Reverse process to install pump.

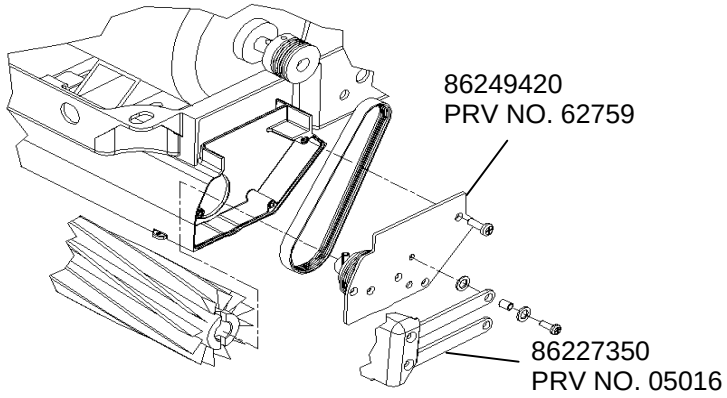



Pump Replacement Parts for Flojet 100 psi 230v (86004770 – PRV NO. 47477)
Pump Head
86251090 – PRV NO. 65204
Motor
86247370 - PRV NO. 53246
Valve Asm
86258860 - PRV NO. 84166
Diaphragm
86235120 - PRV NO. 29219

⚠ WARNING: ONLY QUALIFIED MAINTENANCE PERSONNEL ARE TO PERFORM THE FOLLOWING REPAIRS.

BELT REPLACEMENT

1. Turn off all switches and unplug machine.
2. Remove recovery tank and brush.
3. Remove the (2) screws that fasten the solution tank to the frame, and tilt tank back to expose the inside of the frame.
4. Loosen the (4) screws that hold the brush motor in place and slide motor forward to release tension in belt.
5. Remove the (2) screws that fasten the vacuum shoe links (86227350 - PRV NO. **05016**) to the brush housing.
6. Remove the (3) screws that fasten the side plate (86249420 – PRV NO. **62759**) to the brush housing to remove belt. *NOTE: All components associated with driving the brush will come out with the side plate.*
7. Reverse process to install belt.



PERIODIC MAINTENANCE

Twice a month, flush a white vinegar solution (One quart vinegar to two gallons of water) or anti-browning solution (mixed as directed) through the extractor. This will prevent build-up of alkaline residue in the system. If spray jets become clogged, remove the spray tips, wash them thoroughly, and blow-dry.

NOTE: Do not use pins, wire, etc. to clean nozzles as this could destroy spray pattern.

Periodically inspect all hoses, electrical cables and connections on your machine. Frayed or cracked hoses should be repaired or replaced to eliminate vacuum or solution pressure loss. If the cable insulation is broken or frayed, repair or replace it immediately. Don't take chances with electrical fire or shock.

DAILY / REGULAR MAINTENANCE

Before making any adjustments or repairs to the machine, disconnect the power cord from electrical source.

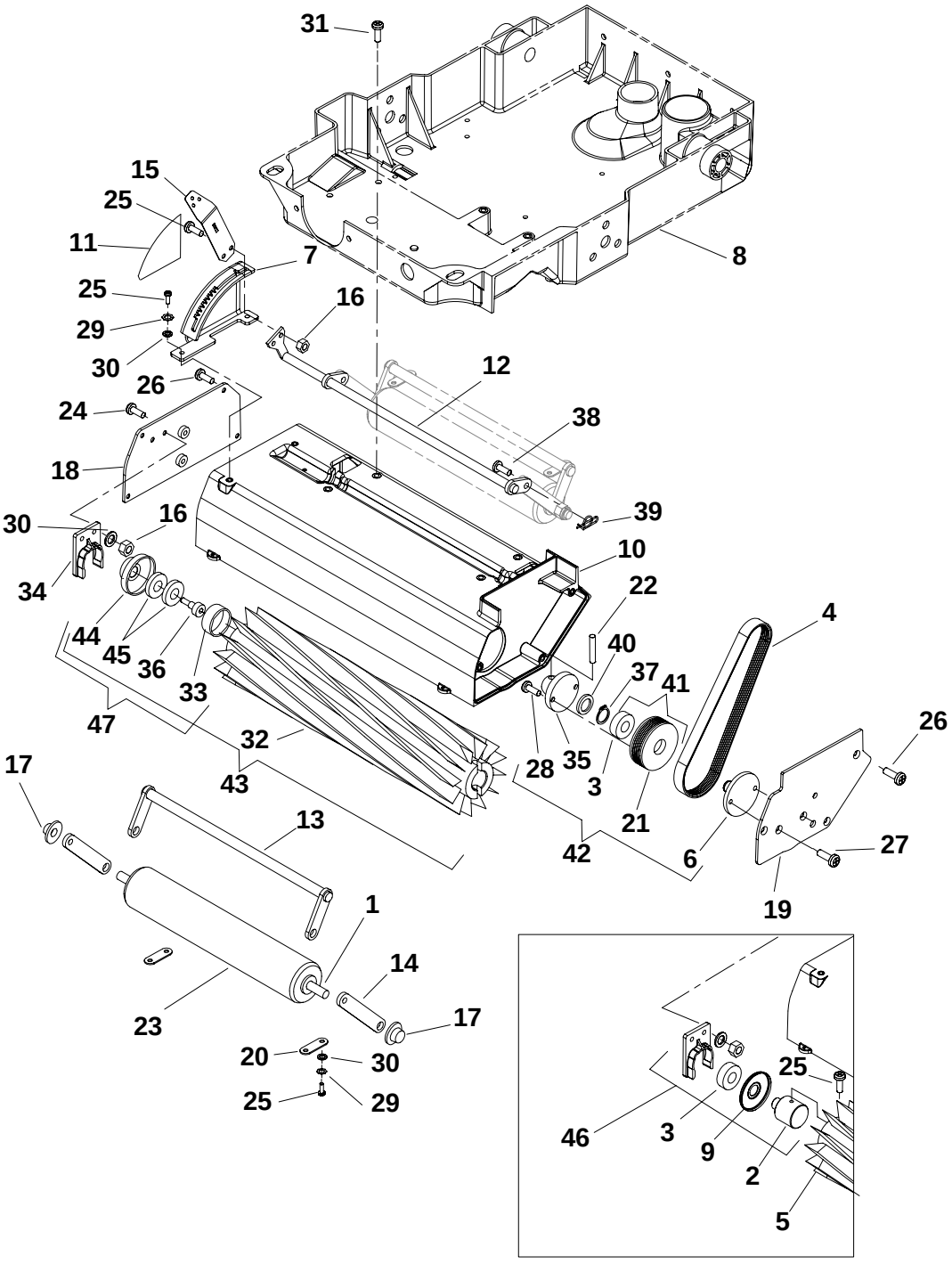
1. Empty unused cleaning solution from the solution tank.
2. Inspect and clean filter screen in solution tank.
3. Flush pumping system with 4 or 7 liters of clean, hot water.
4. After each use, rinse tank with fresh water. Periodically inspect the recovery tank and decontaminate if necessary, using a Hospital Grade Virucide or a 1-10 bleach to water solution. Waste water should be disposed of properly.
5. Check for and remove any lint or debris around vac shoe.
6. Check spray jets for full spray pattern.
7. Remove lint and dirt build-up from brush and housing. *NOTE:* Brush removal.
    a. To remove brush, grab and pull brush out from end opposite drive belt (operator's right). Remove other end from brush driver.
    b. To install brush, line up slots in brush core with pin in driver on drive belt side (operator's left) and push brush onto driver. Then snap bearing end (opposite end) of brush into retaining clip.
8. Check cooling air screen (located on frame behind left wheel) for lint or debris.
9. Check float and shut-off screen and clean as necessary.

NOTE: Always store machine with brush in "Store" position.

TROUBLESHOOTING CHART

PROBLEM	*CAUSE*	*SOLUTION*
No Power, Nothing Runs	**1.** Is the cord plugged in? **2.** Circuit breaker tripped in building. **3.** Faulty switch. **4.** Faulty power cord or pigtail.	**1.** Plug in cord. **2.** Reset breaker **3.** Call for service. **4.** Call for service.
Vacuum Motor Will Not Run	**1.** Vacuum circuit breaker tripped. **2.** Faulty main vacuum switch. **3.** Loose wiring. **4.** Faulty vac motor.	**1.** Reset breaker **2.** Call for service. **3.** Call for service. **4.** Call for service.
Vacuum Motor Runs But Suction Is Poor	**1.** Debris lodged in vac shoe. **2.** Dome gasket defective or missing. **3.** Vacuum hose cracked or hose cuff loose. **4.** Recovery tank full / float ball stuck in the up position.	**1.** Remove debris from vac shoe. **2.** Replace as necessary. **3.** Replace or repair as necessary. **4.** Turn off vac motor. Drain and rinse recovery tank.
Poor Or No Water Flow (Carpet Is Streaky)	**1.** Main pump switch off. **2.** Jets clogged or missing. **3.** Solution filter clogged. **4.** Faulty solenoid.	**1.** Turn on. **2.** Clean using a vinegar /water solution or replace. **3.** Drain solution tank and clean solution filter. **4.** Call for service.
Brush Does Not Spin	**1.** Brush switch off. **2.** Brush circuit breaker tripped **3.** Brush belt broken. **4.** Faulty brush motor.	**1.** Turn on brush switch. **2.** Reset circuit breaker. **3.** Replace as necessary. **4.** Call for service.

BRUSH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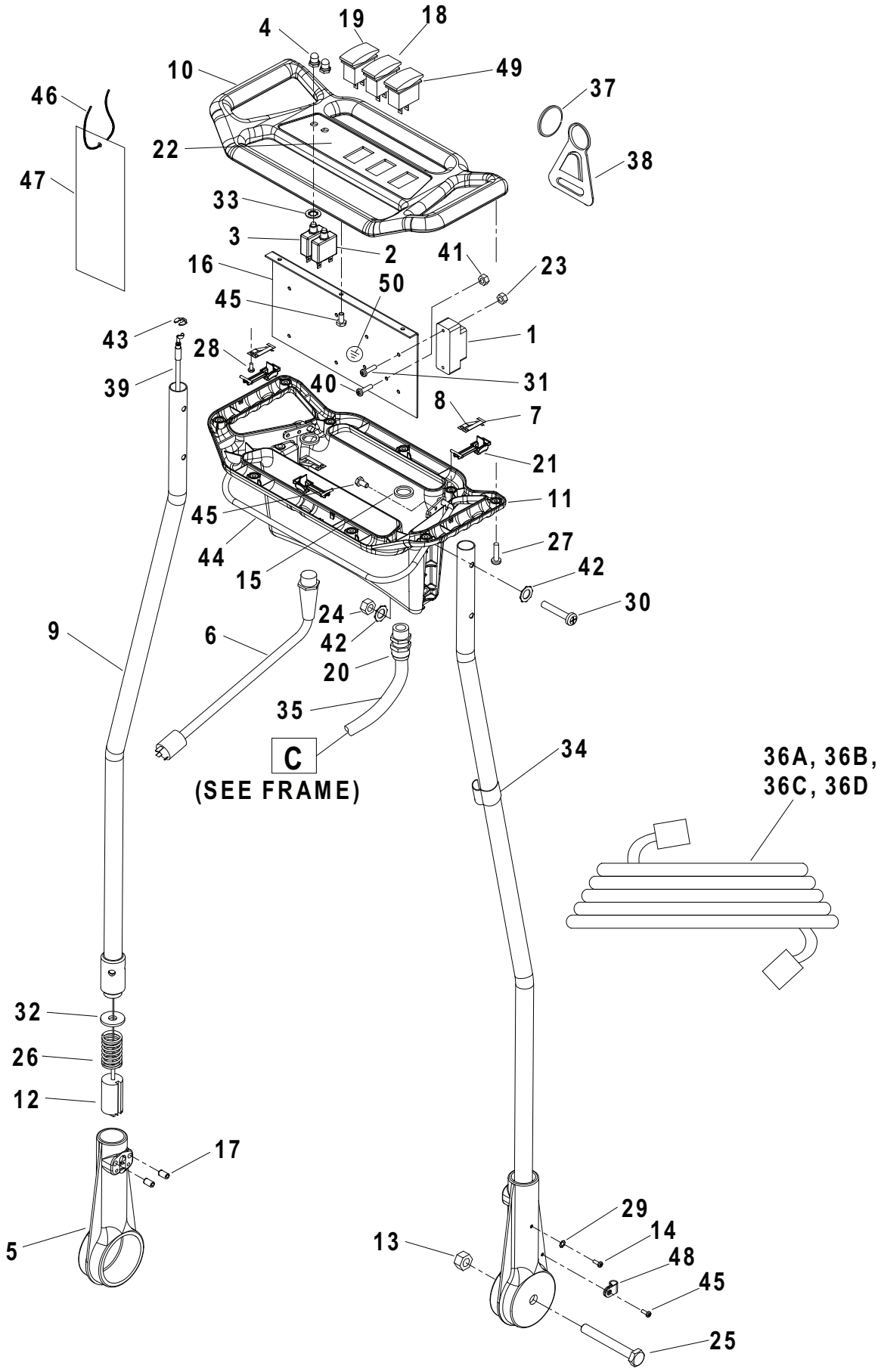
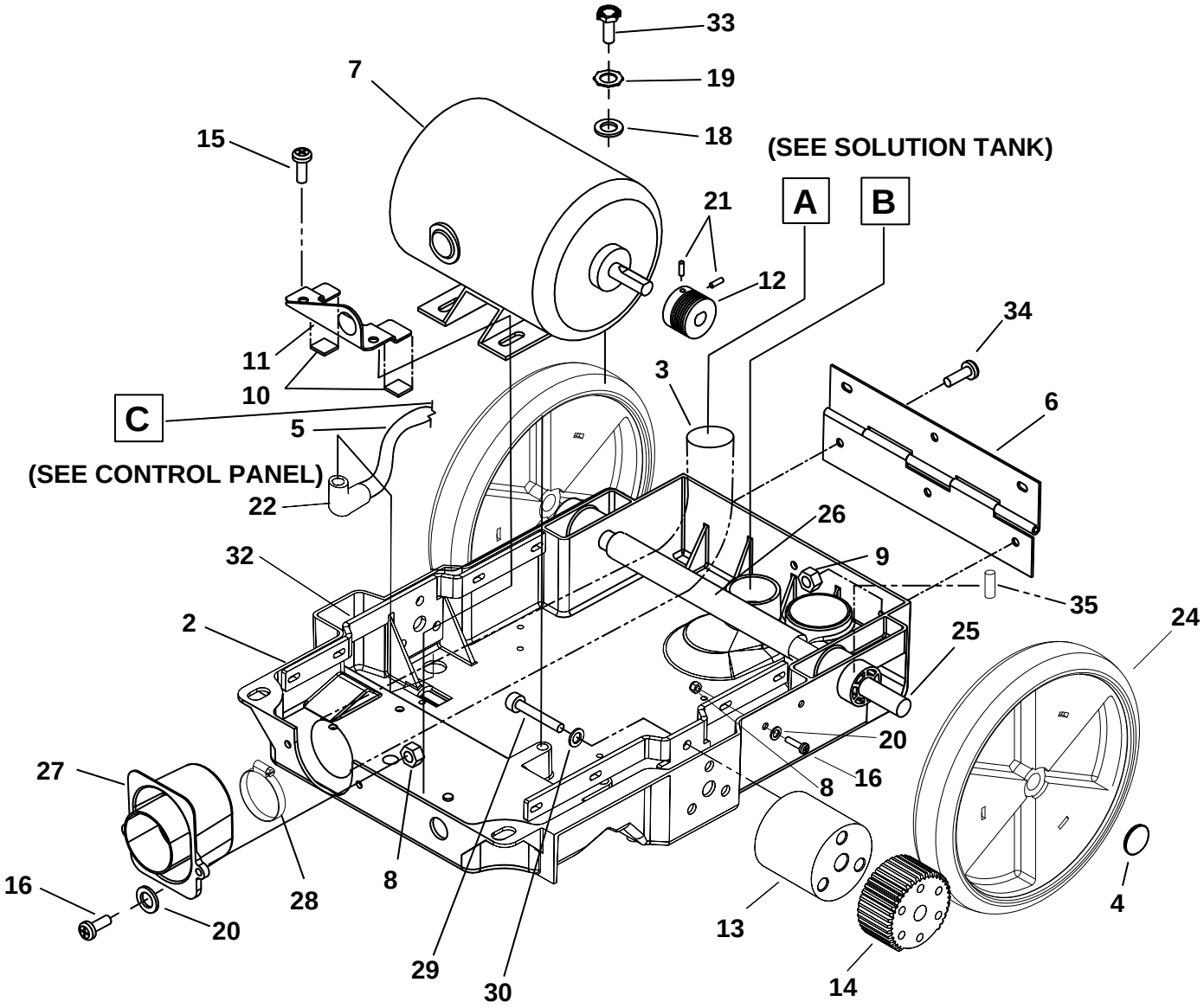
REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86000730	03110	1	AXLE, ROLLER		
2	86227100	04084	1	ADAPTER, BRUSH BRG.		
3	86000900	09019	2	BEARING, 1.125ODX.500IDX.375		
4	86001100	11045	1	BELT, 180J6 MICRO-V		
5	86001150	12515	1	BRUSH, 18L X 3.38OD		
6	86001300	140343	1	BRKT, BRUSH PULLEY		
7	86001310	140351	1	BRKT, BRUSH HEIGHT		
8	86033080	34357	REF	FRAME, CLIPPER 12		
9	86004060	36192	2	GUARD, THREAD		
10	86240970	41346	1	HOUSING, BRUSH, 18"		
11	86004980	50998	1	LABEL, BRUSH HEIGHT		
12	86093080	51311	1	LINKAGE, ASM, BRUSH HEIGHT		
13	86005110	51312	1	LINKAGE ASM, ROLLER SUPPORT		
14	86005120	51314	2	LINK, ROLLER, FRONT		
15	86005130	51317	1	LEVER, HEIGHT ADJUSTMENT		
16	86005640	57030	4	NUT, 10-32 HEX NYLOCK		
17	86005850	57271	2	NUT, 3/8 DIA CAP, TYPE PUSH PLT		
18	86249410	62758	1	PLATE, BRUSH HOUSING RH		
19	86249420	62759	1	PLATE, BRUSH HOUSING LH		
20	86005930	62762	2	PLATE, AXLE RETAINER		
21	86250680	64098	1	PULLEY, 2.2 OD, 6GR, MICRO-V		
22	86006220	66192	1	PIN, ROLL 1/4 X 1.25L		
23	86006430	67411	1	ROLLER, 1.9 DIA X 10.5 LG		
24	86006510	70043	2	SCR, 10-32 X 5/8 PFHMS		
25	86006590	70088	6	SCR, 10-32 X 1/2 PPHMS SS DL		
26	86006650	70177	7	SCR, 10-32 X 1/2 FHMS SS		
27	86006700	70232	2	SCR, 10-32 X 3/8 FHMS SS		
28	86275530	70497	2	SCR, #10-24 X 1/2 SHCS		
29	86010640	87016	4	WASHER, #10 LOCK EXT STAR SS		
30	86010650	87018	6	WASHER, #10 X 9/16 OD		
31	86007030	70675	4	SCR, 1/4-20 X. 5/8 THMS PLTD NP		
32	86230630	12525	1	BRUSH, 18L X 3.38 OD G2	1000090717	
33	86251710	67467	1	RING, TOLERANCE 7/8 ID X 1/2 W	1000090717	
34	86003070	27805	1	CLIP, BEARING		
35	86003370	29157	1	DRIVER, BRUSH		
36	86136760	70767	1	SHLDR BOLT, 3/8 OD X 3/8 L SS NP	1000090717	
37	86272770	67094	1	RING, 1/2 EXT. SNAP		
38	86272510	66310	2	PIN, CLEVIS 1/4 X 1/2 PLTD		
39	86008650	80604	2	COTTER, 1/4" RING		
40	86342240	-	1	SPACER, .81 X 1.06 X .125		
41	86006030	64102	1	PULLEY ASM, BRUSH		
42	86003390	29208	1	DRIVER ASM, BRUSH		
43	86001150	12515	1	BRUSH ASM, 18 IN		
44	86227150	05158	1	ADAPTER BRUSH BRG. DIE CAST	1000090717	
45	86228890	09137	2	BEARING, R6 3/8 ID	1000090717	
46	86028010	47383	1	BRUSH BEARING ASM.		
47	86004750	47416	REF	KIT, BRNG/ADPTR EXTRCTR		

CONTROL PANEL



REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86001240	14020	1	TERMINAL BLOCK, 115V (3-4-3)		
2	86230110	14312	1	BREAKER, 7A 250VAC 50VDC		
3	86002020	14949	1	BREAKER, 4A VDE CIRCUIT		
4	86002010	14942	2	BOOT, 3/8 CIRCUIT BREAKER		
5	86240890	41181	2	HOUSING, CLP HANDLE PIVOT		
6	86261000	23671	1	CORD ASM, PIGTAIL		
7	86003130	27823	3	CONTACT, ELECTRICAL, FLAT		
8	86003140	27824	3	CONTACT, ELECTRICAL, BENT		
9	86004090	38285	2	HANDLE, CLP12 WELDED		
10	86004100	38286	1	HANDLE, CONTROL PANEL FRONT		
11	86004110	38287	1	HANDLE, CONTROL PANEL REAR		
12	86005010	51114	2	LOCK, HANDLE POSITION		
13	86005790	57153	2	NUT, 1/2-13HEX NYLOCK THIN PLTD		
14	86273990	70067	2	SCR, 6-32 X 3/8 PPHMS		
15	86005670	57040	2	NUT, 1/2 NPT CONDUIT		
16	86081530	62766	1	PLATE, CONTROL PANEL, CLP/ADM		
17	86277980	70330	4	SET SCR, 5/16-18 X 1/2 CONE PT		
18	86007140	72130	2	SWITCH, SPST 2-POSITION ROCKER		
19	86007200	72162	1	SWITCH, DPDT3-POSITION ROCKER		
20	86256180	73195	1	STRAIN RELIEF, 1/2 NPT (.48ID)		
21	86008350	78418	3	TRIGGER, SWITCH		
22	86245950	50996	1	LABEL, CONTROL PANEL, CLP/ADM		
23	86005760	57116	2	NUT, 6-32 W/STAR WASHER PLTD		
24	86005810	57245	4	NUT, 1/4-20 HEX NYLOCK SS		
25	86276510	70672	2	SCR, 1/2-13 X 4.75HHCS GR5 PLT		
26	86226840	73307	2	SPRING, COMP .88D X1.4L X.100W		
27	86006870	70406	9	SCR, #10 X 3/4 PPHST TYPE B		
28	86006620	70127	6	SCR, 6-32 X 1/4 PPHMS SS		
29	86279020	87026	2	WASHER, #6 LOCK EXT STAR SS		
30	86274150	70105	4	SCR, 1/4-20 X 1.75 HHCS		
31	86006710	70235	2	SCR, 6-32 X 1.0 PH BLK NYLON		
32	86010720	87086	2	WASHER, M10 X 30 PLTD		
33	86010750	87100	2	WASHER, 3/8 ID INT.LOCK THIN		
34	86198480	27371	2	CLIP, POWER CORD		
35	86238820	41351	REF	HARNESS, MAIN CLP/ADM		
36A	86002610	23683	1	CORD ASM, 230V BRITAIN 50FT		
36B	86002600	23682	1	CORD ASM, 230V EURO 50FT		
36C	86031550	23681	1	CORD ASM, 230V SWISS 50FT		
36D	86260960	23521	1	CORD ASM, 230V AUST 50FT		
37	86272840	67147	1	RING, 2" DIA SPLIT		
38	86256170	73169	1	STRAIN RELIEF, CORD HOOK		
39	86003120	27817	2	CABLE, .06 X 40, 0707, SS		
40	86006830	70386	1	SCR, 10-32 X 1” PPHMS		
41	86005700	57104	3	NUT, 10-32 W/STAR WASHER PLTD		
42	86010660	87025	6	WASHER, 1/4 LOCK EXT STAR SS		
43	86006410	67381	2	RING, 1/4 KLIP		
44	86092980	51319	1	LEVER ASM, CLP HANDLE ADJ		
45	86006790	70351	5	SCR, 10-32 X 3/8 HHTR W/STAR		
46	86002870	27417	1	CORD, 99807 1/8 X 12"		
47	86232300	500018	1	CARD, INSTRUCTION CLP12		
48	86002370	20035	1	CLAMP, 7/16 DIA NYLON UL		
49	86007130	72128	1	SWITCH, DPDT, 2 POSITION ROCKER		
50	86245040	50279	1	LABEL, GROUND SYMBOL		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(SEE SOLUTION TANK)
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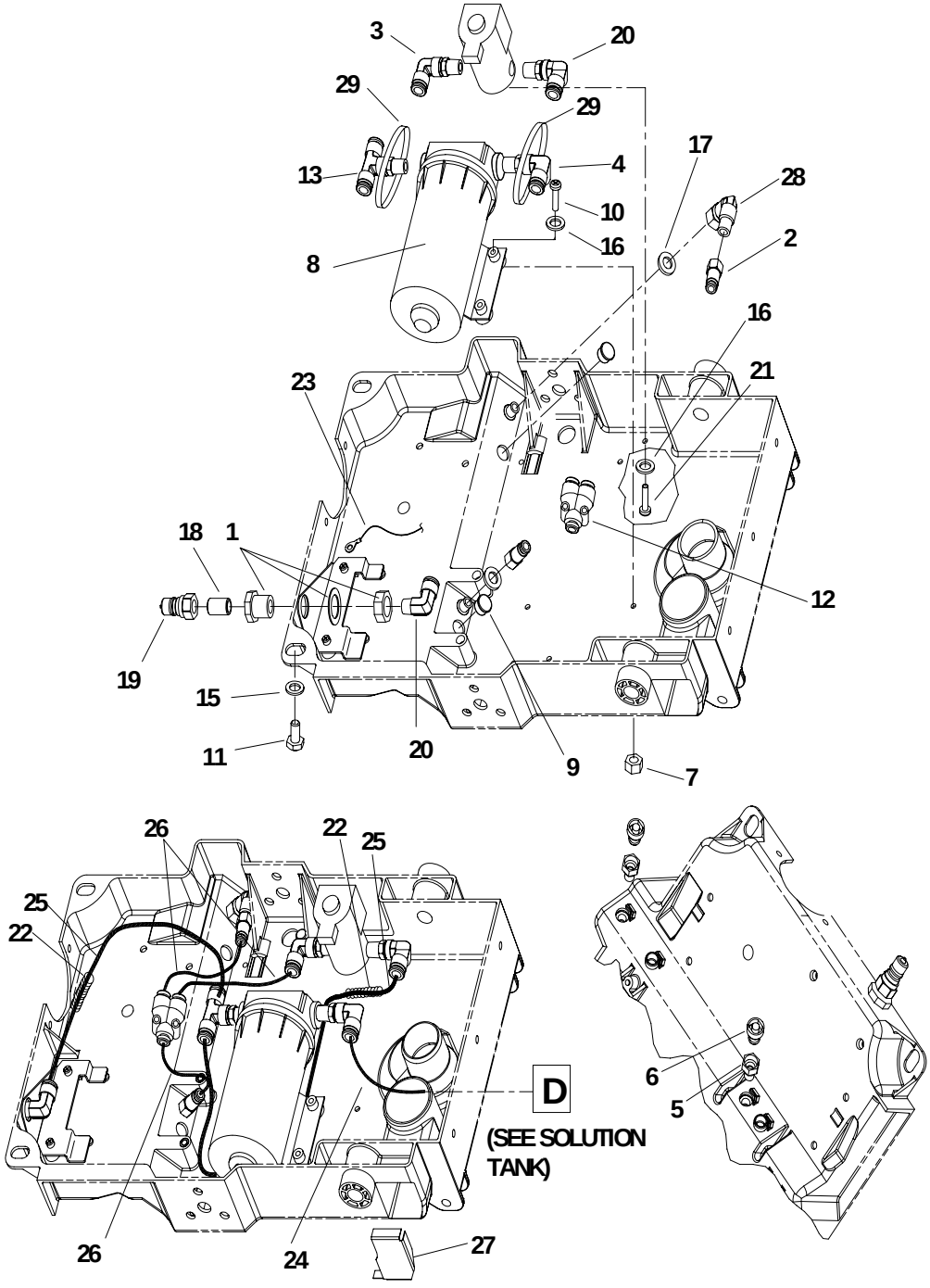
REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	-	OPEN	-	-		
2	86033080	34357	1	FRAME, CLIPPER 12		
3	86004340	39528	1	HOSE ASM, 1.5 BLK VAC X 15.5		
4	86001660	41236	2	HUBCAP, 5/8" SHAFT		
5	86238820	41351	1	HARNESS, MAIN, CLP/ADM		
6	86239610	41354	1	HINGE, TANK TO FRAME		
7	86005370	53641	1	MOTOR ASM, BRUSH CLP FAMILY		
8	86005640	57030	10	NUT, 10-32 HEX NYLOCK		
9	86005810	57245	3	NUT, 1/4-20 HEX NYLOCK SS		
10	86195830	99809	2	FOAM TAPE, 1/8 THK X 3/4 1SDA		
11	86249430	62761	1	PLATE, BRUSH MTR CLAMP		
12	86006020	64099	1	PULLEY, 1.4 OD, 6GR, MICRO-V		
13	86254480	73949	2	SPACER, HANDLE PIVOT		
14	86238200	36081	2	GEAR, 40 TOOTH		
15	86276410	70643	2	SCR, 1/4-20 X 3/8 PPHMS		
16	86273980	70066	10	SCR, 10-32 X 3/4 PPHMS		
17	-	OPEN	-	-		
18	86010630	87013	2	WASHER, 1/4 ID X 5/8 OD SS		
19	86010660	87025	2	WASHER, 1/4 LOCK EXT STAR SS		
20	86010650	87018	10	WASHER, #10 X 9/16 OD		
21	86006550	70074	2	SET SCR, 10-32 X 1/4 KCP		
22	86256190	73197	1	STRAIN RELIEF, 90 DEGREE		
23	-	OPEN	-	-		
24	86226050	89279	2	WHEEL, 9.75" X 1.5"		
25	86066230	03107	1	AXLE, 5/8 X 17.06L		
26	86134490	99667	10”	HEAT SHRINK, 3/4 ID UL/CSA		
27	86253090	73943	1	SEAL, FRAME/TANK		
28	86233140	20041	1	CLAMP, 2.0" WORM GEAR		
29	86276500	70671	6	SCR, 5/16-18 X 3.5 SHCS PLATED		
30	86279130	87083	6	WASHER, 5/16 SPLIT LOCK PLTD		
31	86069290	140354	1	BRKT, CLP HANDLE SUPPORT		
32	86069300	140355	1	BRKT, CLP HANDLE SUPPORT LT		
33	86274760	70271	2	SCR, 1/4-20 X 1/2 HHCS PLTD		
34	86006530	70057	3	SCR, 1/4-20 X 1 PPHMS SS		
35	86272160	66052	1	PIN, ROLL 1/8” X 1.0”L		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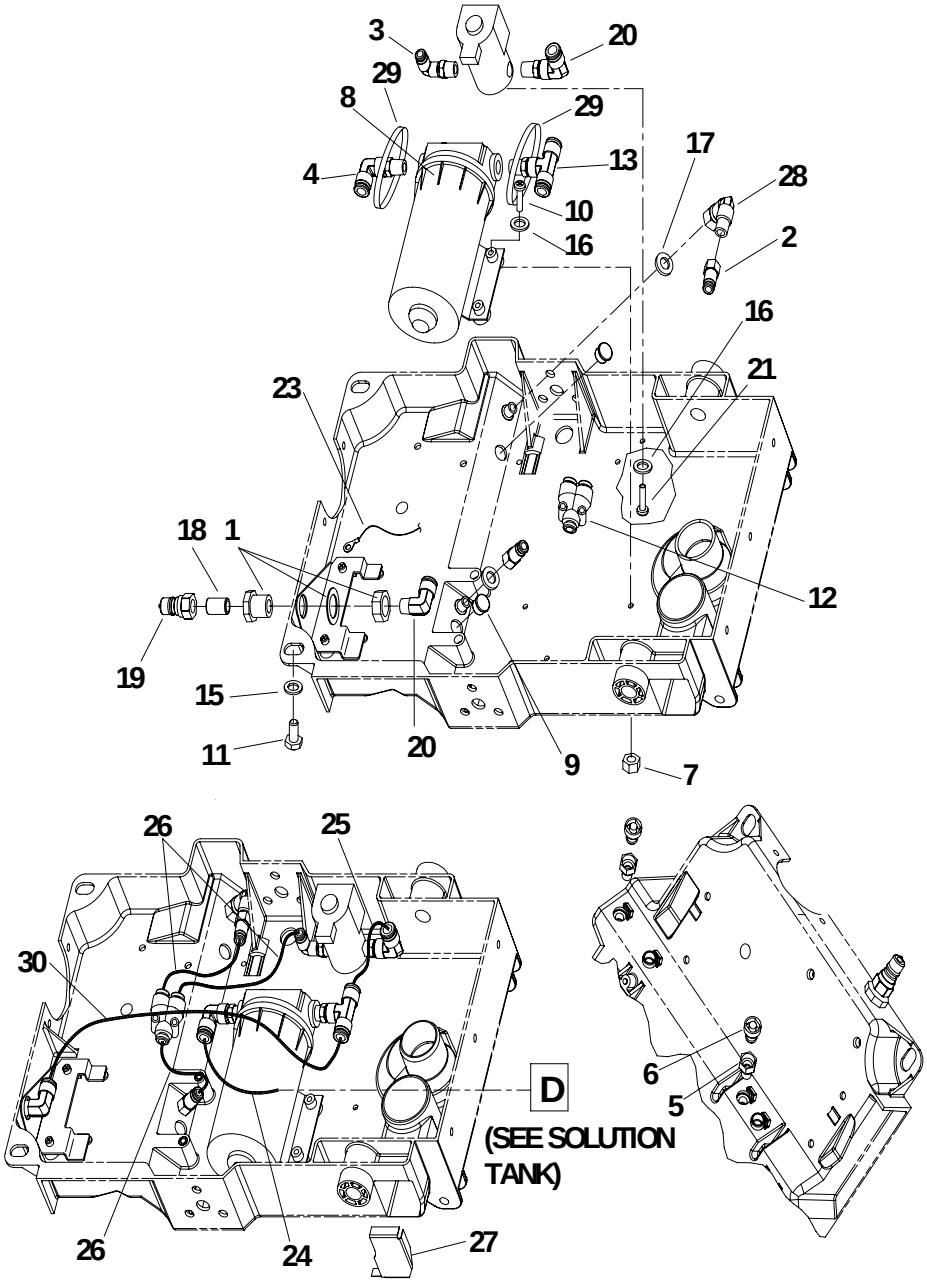
REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86002470	22072	1	COUPLING, 1/4 ANCHOR W/1" HEX		
2	86002480	22090	2	CONNECTOR, 1/8FPT X 1/4 TUBE QC		
3	86003470	31072	1	ELBOW, SWIVEL, 1/4MPTX1/4TUBE		
4	86003490	31074	1	ELBOW, SWIVEL,3/8MPTX3/8TUBE QC		
5	86004570	44067	2	JET BODY, MINI PROMAX BODY		
6	86004580	44068	2	JET, MINI PROMAX 9504		
7	86005640	57030	2	NUT, 10-32 HEX NYLOCK		
8	86026400	65254	1	PUMP ASM, 230V 100PSI W/CONN		
9	86250140	66288	2	PLUG, 9/16 OD BLK NYLON		
10	86274410	70195	2	SCR, 10-32 X 1.25 PPHMS		
11	86273750	70011	2	SCR, 1/4-20 X 5/8 HHCS SS		
12	86003640	34355	1	FITTING,1/4 TUBE,"Y", QC		
13	86008360	78419	1	TEE, 3/8 MPT X 3/8 TUBE, QC		
14	86010570	84165	1	VALVE ASM,SOLENOID CLP FAMILY		
15	86010810	87191	2	WASHER, 1/4"IDX1.0OD. FLAT SS		
16	86010650	87018	4	WASHER, #10 X 9/16 OD		
17	86010820	87192	2	WASHER, 7/16 X 3/4 X .19RUBBER		
18	86005590	56014	1	NIPPLE, 1/4 CLOSE		
19	86005580	56012	1	NIPPLE, 1/4 FPT QD		
20	86003500	31076	2	ELBOW, 1/4 MPT X 3/8 TUBE, QC		
21	86006590	70088	2	SCR, 10-32 X 1/2 PPHMS SS		
22	86279930	29277	2	DUCT, 1/2 ID SPLT FLX X 16”		
23	86267400	880278	1	WIRE, 22" GRN/18 76011 X 76011		
24	86282340	39720	1	HOSE, 3/8 OD X 1/4 ID URTHN X 22”		
25	86282350	39721	2	HOSE, 3/8 ID NYLON YLW X 17”		
26	86281900	39531	3	HOSE, 1/4 ID NYLON YLW X 5”		
27	86253020	73963	1	SCREEN, INTAKE		
28	86197400	31022	1	ELBOW, 1/8NPT STREET		
29	86227950	140387	2	BANDS, RUBBER		

PUMP

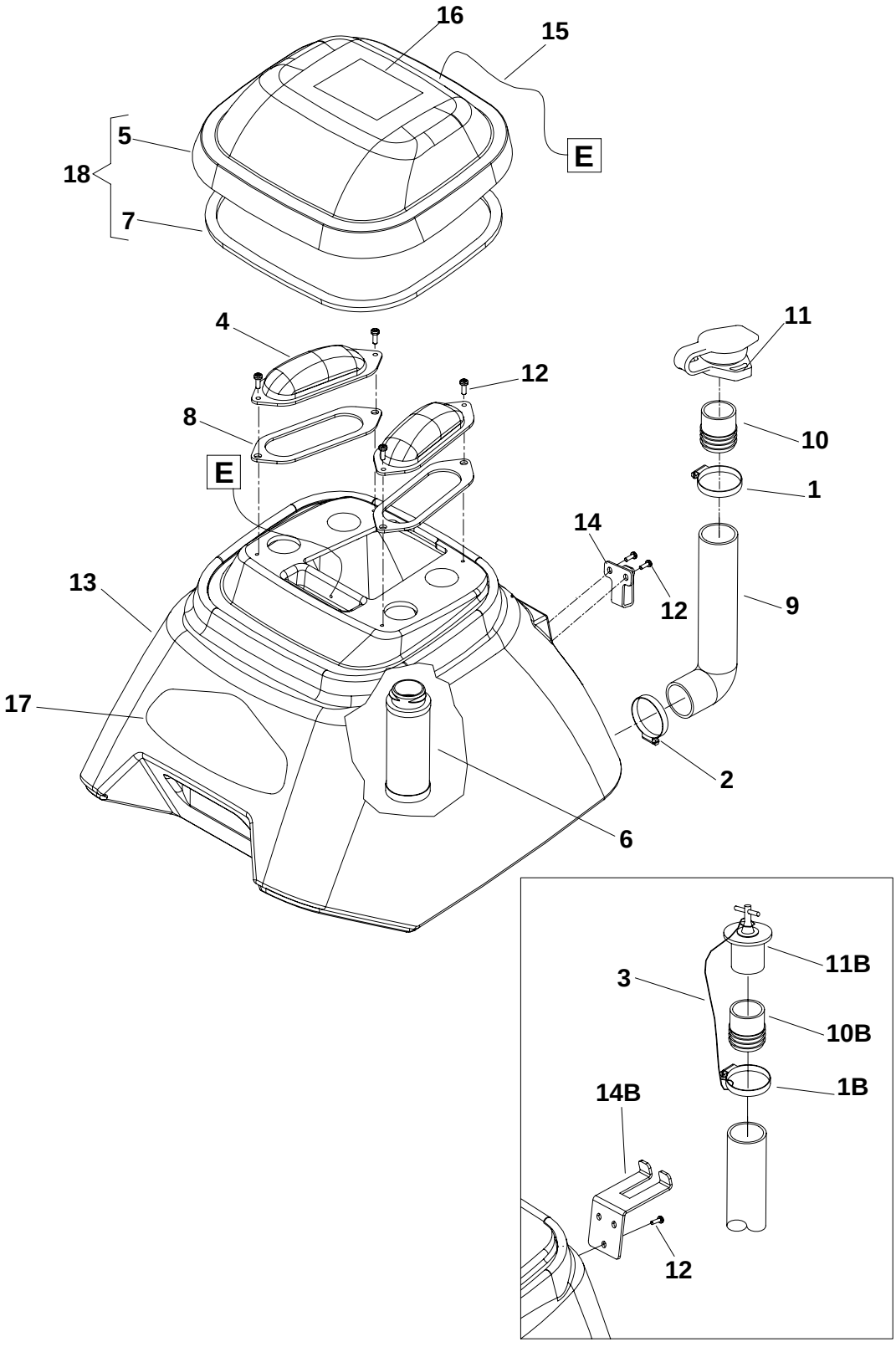
PRIOR TO S/N 1000153174



PROIR TO S/N 1000153174

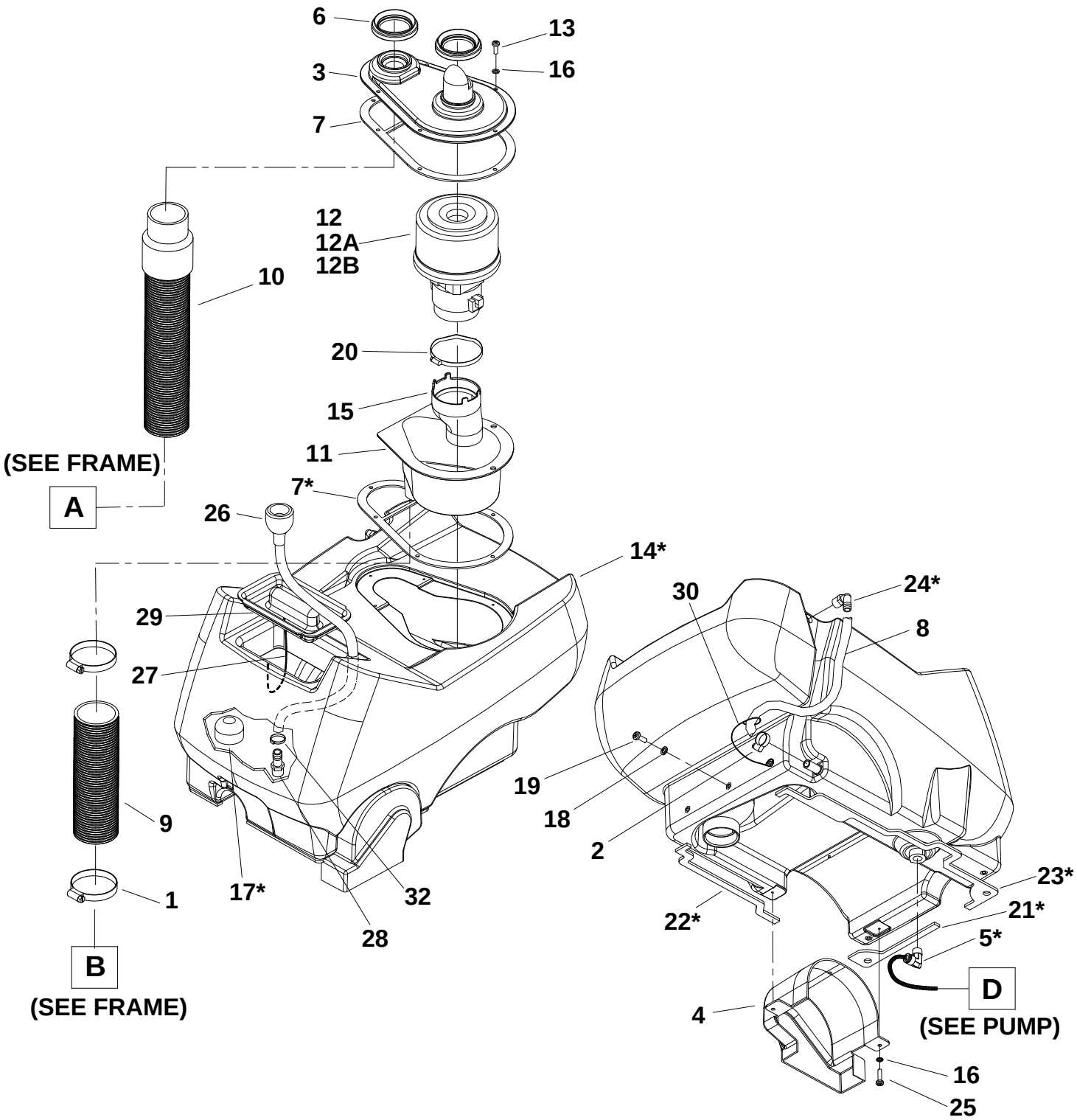
REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86002470	22072	1	COUPLING, 1/4 ANCHOR W/1" HEX		
2	86002480	22090	2	CONNECTOR, 1/8FPT X 1/4 TUBEQC		
3	86003470	31072	1	ELBOW, SWIVEL, 1/4MPTX1/4TUBE		
4	86003490	31074	1	ELBOW, SWIVEL,3/8MPTX3/8TUBEQC		
5	86004570	44067	2	JET BODY, MINI PROMAX BODY		
6	86004580	44068	2	JET, MINI PROMAX 9504		
7	86005640	57030	2	NUT, 10-32 HEX NYLOCK		
8	86006120	65190	1	PUMP ASM, CLP/ADM		
9	86250140	66288	2	PLUG, 9/16 OD BLK NYLON		
10	86006830	70386	2	SCR, 10-32 X 1.0 PPHMS		
11	86273750	70011	2	SCR, 1/4-20 X 5/8 HHCS SS		
12	86003640	34355	1	FITTING,1/4 TUBE,"Y", QC		
13	86008360	78419	1	TEE, 3/8 MPT X 3/8 TUBE, QC		
14	86010570	84165	1	VALVE ASM,SOLENOID CLP FAMILY		
15	86010810	87191	2	WASHER, 1/4"IDX1.0OD. FLAT SS		
16	86010650	87018	4	WASHER, #10 X 9/16 OD		
17	86010820	87192	2	WASHER, 7/16 X 3/4 X .19RUBBER		
18	86005590	56014	1	NIPPLE, 1/4 CLOSE		
19	86005580	56012	1	NIPPLE, 1/4 FPT QD		
20	86003500	31076	2	ELBOW, 1/4 MPT X 3/8 TUBE, QC		
21	86006590	70088	2	SCR, 10-32 X 1/2 PPHMS SS		
22	-	OPEN	-	-		
23	86267400	880278	1	WIRE, 22" GRN/18 76011 X 76011		
24	86281890	39529	1	HOSE, 3/8 URETHANE X 29"		
25	86004350	39530	1	HOSE, 3/8 NYLON X 6"		
26	86281900	39531	3	HOSE, 1/4 ID NYLON X 5”		
27	86253020	73963	1	SCREEN, INTAKE		
28	86197400	31022	1	ELBOW, 1/8NPT STREET		
29	86227950	140387	2	BANDS, RUBBER		
30	86004400	39591	1	HOSE, 3/8 ID NYLON YLW X 29”		

RECOVERY TANK



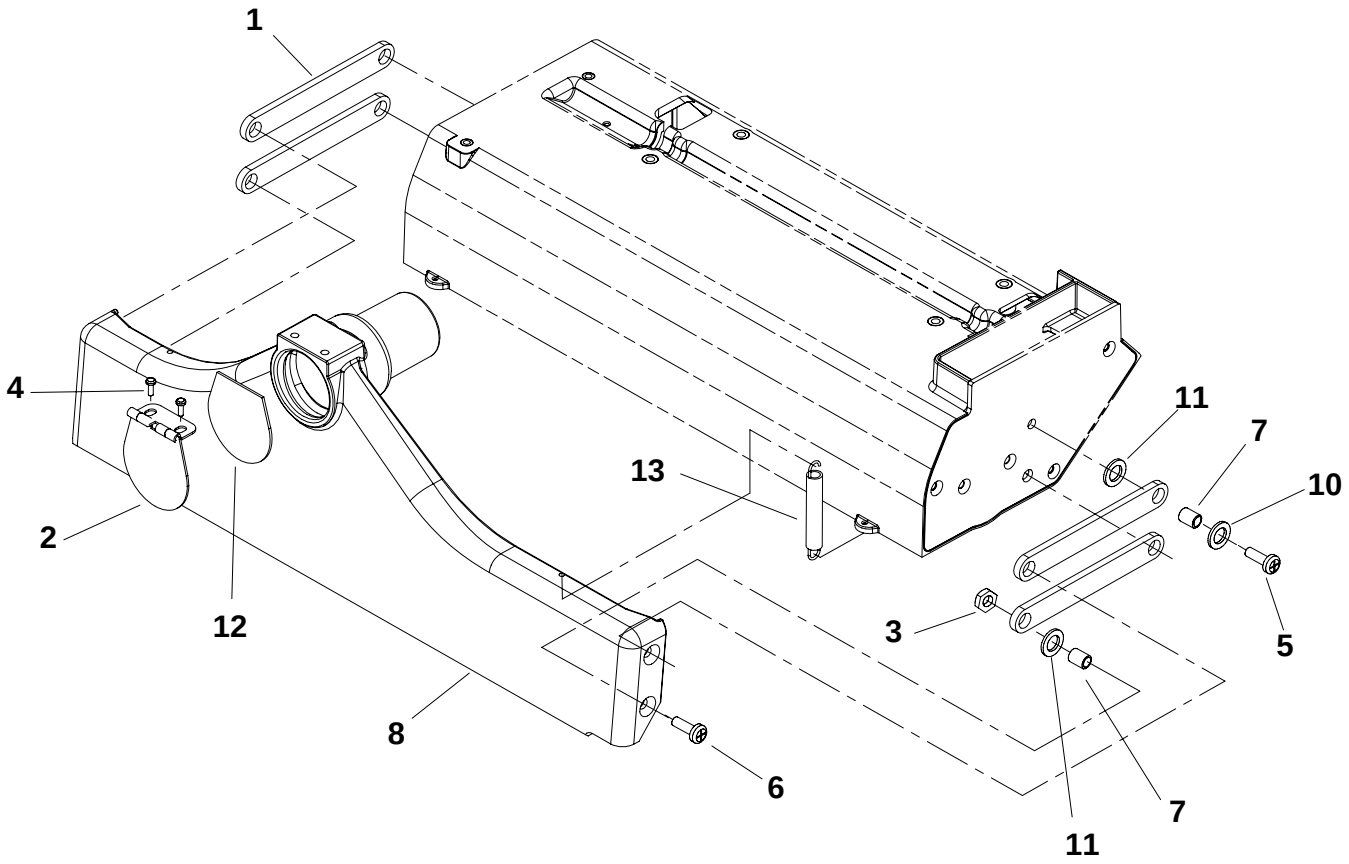
REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1A	86002400	20064	1	CLAMP, 2.0" WORM GEAR X .312		
1B	86002350	20002	1	CLAMP, 2.0” NYLON RATCHET		
2	86233140	20041	1	CLAMP, 2.0" WORM GEAR		
3	86002930	27670	1	CORD, DRAIN PLUG		
4	86003110	27816	2	COVER, REC. TANK		
5	86235280	28060	1	DOME, CLP FAMILY		
6	86003630	34351	1	FLOAT SHUT-OFF		
7	86003910	35230	1	GASKET, DOME		
8	86003930	35232	2	GASKET, PORT COVER		
9	86004200	39353	1	HOSE, 1.5 X 12.0 DRAIN		
10A	86004510	41391	1	HOSE, INSERT		
10B	86004450	40019	1	HOSEBARB, 1.50 DOUBLE MCHD		
11A	86004500	41390	1	HOSE, CAP		
11B	86006240	66227	1	PLUG, DRAIN HOSE		
12	86006600	70114	6	SCR, #10 X 3/4 PPHST TYPE B		
13	86032290	75262	1	TANK, CLP RECOVERY		
14A	86001370	140408	1	BRKT, HOSE HOOK		
14B	86001190	140133	1	BRKT, RECOVERY HOSE MTG		
15	86002870	27417	1	CORD, 99807 1/8 X 12"		
16	86242230	500009	1	LABEL, WARNING		
17	86245920	50993	1	LABEL, CLIPPER MAIN		
18	86003330	28061	1	DOME ASM, CLP FAM		

SOLUTION TANK



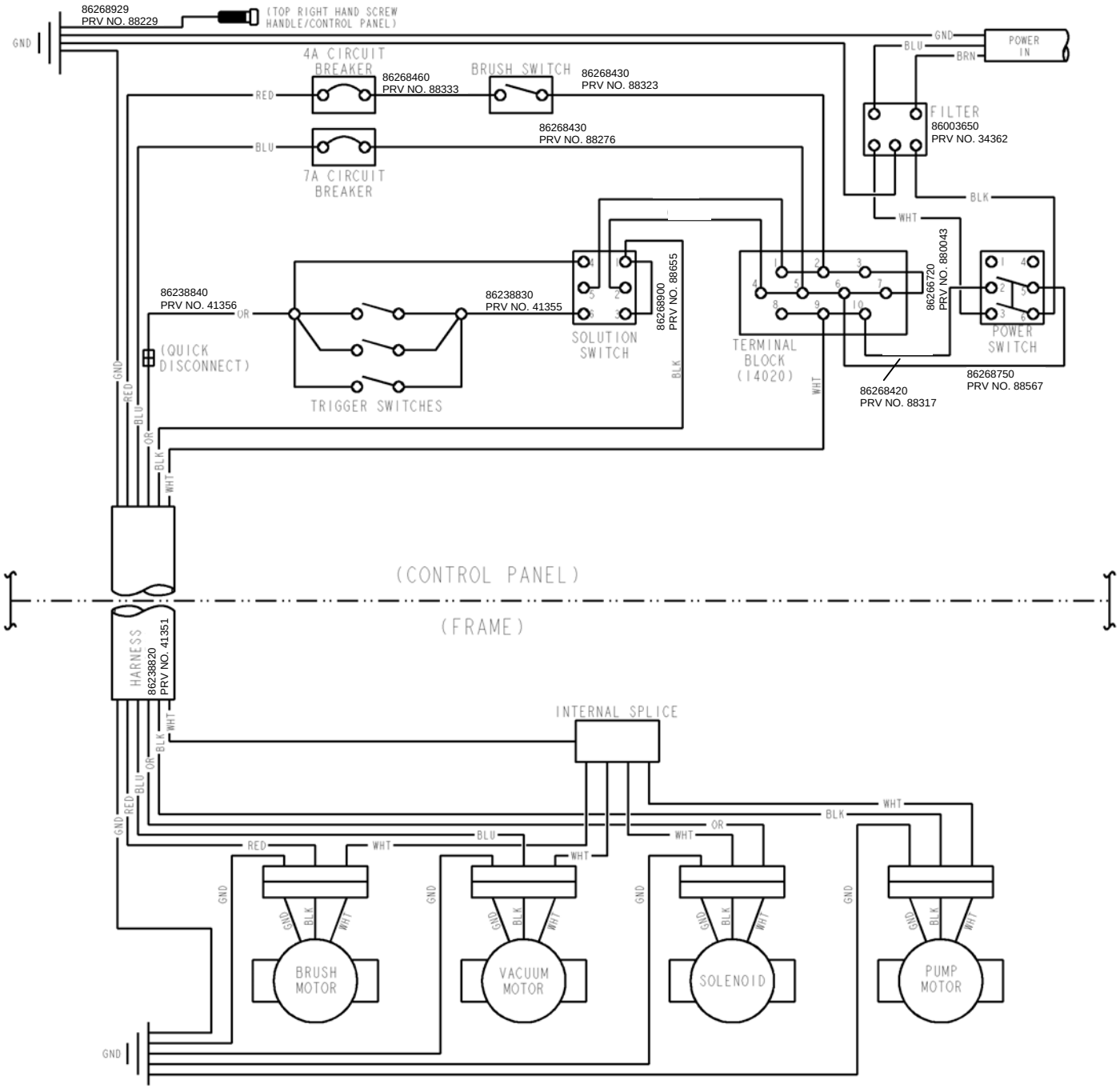
REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86233140	20041	2	CLAMP, 2.0" WORM GEAR		
2	86233150	20042	1	CLAMP, 3/8 HOSE (D-SLOT)		
3	86003080	27809	1	COVER, VAC MOTOR		
4	86003090	27810	1	COVER, BELT		
5	86235500	31081	1	ELBOW, 3/8 MPT X 3/8 TUBE, PLASTIC		
6	86003790	35175	2	GASKET, TANK TO VAC COVER		
7	86003920	35231	2	GASKET, VAC COVER (CLP FAMILY)		
8	86281880	39526	1	HOSE,1/2 CLEAR X 12		
9	86240100	39536	1	HOSE, 1.5 BLK VAC X 5.0		
10	86004340	39528	REF	HOSE ASM, 1.5 BLK VAC X 15.5		
11	86240980	41348	1	HOUSING, VAC MOTOR		
12	86005420	53791	1	VAC MOTOR ASM, CLP FAMILY		
12A	86230760	140216	-	BRUSH SET, 230V VAC AMETEK		SERVICE ONLY
12B	86135330	140688	-	BRUSH SET, 230V VAC MTR WINDSOR	*	SERVICE ONLY
13	86275690	70525	6	SCR, #10 X 1.0 PPHST TYPE B		
14	86032280	75261	1	TANK, CLP SOLUTION		
15	86259070	85038	1	VENT, COOLING AIR LARGE		
16	86010650	87018	8	WASHER, #10 X 9/16 OD		
17	86007970	73864	1	STRAINER, 3/8 IN. NPT 60 MESH		
18	86010630	87013	3	WASHER, 1/4 ID X 5/8 OD SS		
19	86006580	70085	3	SCR, 1/4-20 X 1/2 PPHMS SS DL		
20	86233260	20092	1	CLAMP, 3.5" WORM GEAR		
21	86003950	35236	1	GASKET, TANK, L-F		
22	86003960	35237	1	GASKET, TANK, L-R		
23	86003970	35238	1	GASKET, TANK, RH		
24	86197940	40027	1	HOSEBARB, 3/8MPTX1/2 90D DL		
25	86006600	70114	2	SCR, #10 X 3/4 PPHST TYPE B		
26	86260690	02130	1	HOSE ASSY- FILL HOSE		
27	86002870	27417	1	CORD, 99807 1/8 X 12"		
28	86197920	40023	1	HOSEBARB, 1/2MPT X 3/8 DL		
29	86234790	27827	1	COVER, CLP SOLUTION		
30	86246060	51321	1	LANYARD, .06 X 2.88		
31	86026680	75278	1	TANK ASM, SOLUTION CLP12		* ITEMS INCLUDED
32	86233090	20016	1	CLAMP, 1/4 ID HOSE		

VACUUM SHOE



REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	86227350	05016	4	ARM, VAC SHOE PARALLEL		
2	86234760	27674	1	COVER, ACCESSORY PORT		
3	86005810	57245	4	NUT, 1/4-20 HEX NYLOCK SS		
4	86006790	70351	2	SCR, 10-32 X 3/8 HHTR W/STAR		
5	86275120	70360	4	SCR, 1/4-20 X.75 PPHMS PHIL		
6	86006840	70390	4	SCR, 1/4-20 X 1 FHCS PLTD		
7	86008130	73958	8	SPACER, 3/8ODX.058WX.2814,CRS		
8	86258630	85040	1	VAC SHOE, 18"		
9	-	OPEN	-	-		
10	86010630	87013	4	WASHER, 1/4 ID X 5/8 OD SS		
11	86010700	87074	8	WASHER, WAVE 3/8ID X3/4D X.125		
12	86003780	35171	1	GASKET, ACCESSORY PORT		
13	86008120	73955	2	SPRING, EXT .38D X2.75L X.055W		

WIRING DIAGRAM



PART NO.	PRV NO.	DESCRIPTION	SERIAL NO. FROM	NOTES:
86001150	12515	BRUSH, 18L X 3.38OD		
86001100	11045	BELT, 180J6 MICRO-V		
86000900	09019	BEARING, 1.125ODX.500IDX.375		
86004570	44067	JET BODY, MINI PROMAX BODY		
86004580	44068	JET, MINI PROMAX 9504		
86026400	65254	PUMP ASM, 230V 100 PSI W/ CONN		
86010570	84165	VALVE ASM, SOLENOID CLP FAMILY		
86003780	35171	GASKET, ACCESSORY PORT		
86230110	14312	BREAKER, 7A 250VAC 50VDC		
86002020	14949	BREAKER, 4A VDE CIRCUIT		
86007140	72130	SWITCH, SPST 2-POSITION ROCKER		
86007200	72162	SWITCH, DPDT3-POSITION ROCKER		
86005370	53641	VAC MOTOR ASM, CLP FAMILY		
86007970	73864	STRAINER, 3/8 IN. NPT 60 MESH		
86003330	28061	DOME ASM, CLP FAMILY		
86003630	34351	FLOAT SHUT-OFF		
86006240	66227	PLUG, DRAIN HOSE		
86230760	140216	BRUSH SET, 230V VAC AMETEK		
86235330	140688	BRUSH SET, 230V VAC MTR WINDSOR		*

WINDSOR®

Manufacturers of Innovative Building Maintenance Equipment

EC Declaration of Conformity

We herewith declare,

Windsor Industries, Inc.
1351 W. Stanford Ave.
Englewood, CO 80110-5545 USA

that the following product complies with the appropriate essential health and safety requirements of the relevant EC Directives listed below, based on the relevant sections of the applicable EC standards and other normative documents.

Product: Clipper 12I

Product Identification: Rated 230 V 7A
50 Hz

Trademark:

WINDSOR®

Model/Type Ref.: CLP12I

Product Description: This product is a portable, electrical motor-operated, spray extraction appliance. It employs water-based cleaning agents for cleaning fabrics, upholstery, carpets, floor coverings, or hard surfaces. It is intended for commercial use.

Applicable EC Directives:
EC Machinery Directive
(89/392/EEC & 91/368/EEC & 93/44/EEC & 93/68/EEC)
EC Low Voltage Directive
(73/23/EEC & 93/68/EEC)
EC Directive of Electromagnetic Compatibility
(89/336/EEC & 93/68/EEC)

Applicable Harmonized Standards:
EN 60335-1: 1991
EN 60335-2-68: 1997
EN 55014-1: 1997
EN 55014-2: 1997

Tom Bettis — Authorized Signature

6-21-00 — Date

Title of Signature: Vice President, Windsor Industries, Inc.

Windsor Industries, Inc.,
1351 West Stanford Avenue,
Englewood, CO 80110 USA
303.762.1800 FAX 303.762.0817

QUEST... for Continuous Improvement.
Windsor's Quality Management System is Certified ISO 9001.